Politics and processes in the collaborative procurement of surveillance

Paterson, Lucy Mary

Awarding institution:
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The Politics and Processes in the Collaborative Procurement for Surveillance

By Lucy Paterson

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Faculty of Social Science and Public Policy
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Supervisor: Dr Christopher Kinsey

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Abstract

The dynamics of collaborative procurement in the security sector are various and complex. They are affected not only by international politics and the security context, but also by the decision-making processes and practices of the procuring organisation. Successful collaborative acquisition is rare and existing scholarship often focuses on the inefficiencies and problems that beset these processes. This dissertation takes an original approach and attempts to identify positive drivers for successful collaborative procurement by focussing the enquiry on the capability that is being procured, surveillance, and on the related bureaucratic aspects of the procurement decision-making.

Multilateral procurement of security capabilities is necessary to meet the demand for joint, civil military solutions against transnational threats such as human trafficking, terrorism and cross border crime. Multinational surveillance missions fulfil functions of 'situational awareness' and monitoring border regions. With record numbers of migrants crossing the Mediterranean, the EU and NATO are increasing their capabilities and procurement efforts to acquire surveillance capability. The procurement of a surveillance capability by Western security organisations is part of an international security strategy and embedded in Western security culture.

This study analyses the social processes of collaboration in a joint surveillance capability in NATO and the EU. By referring to rational choice, institutional models and organisational, this study applies defence procurement approaches to consider drivers for multilateral procurement of a 'civil military' surveillance capability. The research question asks: 'Is the multilateral procurement of surveillance capability driven by calculus or culture?' Potential explanations lie in the context of NATO and EU's strategic culture, and the interests of actors involved in the procurement processes of these security organisations. Ultimately the study concludes that calculus drivers for procurement activity are necessary but not always sufficient to conclude successful collaborative acquisition. Cultural drivers such as multilateralism, the Western 'community of values' and the civil military security culture, are needed to achieve agreement for collaboration and political support.

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However, my most heartfelt thanks and gratitude goes to my wonderful husband, Sean. Without his patience, support and love I certainly would not have started, continued or finished this PhD. I dedicate this dissertation to him.

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Acronyms

AGS	Alliance Ground Surveillance
AGSSC	AGS Steering Committee
ASG	Assistant Secretary General
ASS	Aerial Surveillance Services
ASTOR	Airborne Stand off Radar
AWACs	Airborne Early Warning and Control aircraft
CSC	Capability Steering Committee (also known as AGSSC)
CNAD	Conference of National Armaments Directors
CHoD	Chief of Defence
CISE	Common Information Sharing Environment
CTAS	Cooperative Transatlantic AGS System
C4ISR	Command, control, communications, computers, intelligence,
DID	Defence Investment Division (NATO)
DCI	Defence Capability Initiative
DG MHA	Directorate Generale Migration and Home Affairs
DoD	Department of Defence
ECN	Eurosur Communication Network
EC	Evaluation Committee
EDA	European Defence Agency
EEAS	European External Action Service
EMSA	European Maritime and Safety Agency
EPO	Embryonic Project Office
FP7	7th Framework Programme
HALE	High Altitude Long Endurance
ICT	Information Communications and Technology
IOC	Initial Operational Capacity
IP	Industrial Participation
IS	International Staff
ISR	Intelligence Surveillance and Reconnaissance
ITAR	International Traffic in Arms Regulations
MMR	Minimum Military Requirement
MP RTIP	Multi Platform Radar Technology Insertion Programme

NAC	North Atlantic Council
NAGSMA	NATO AGS Management Agency
NAGSMO	NATO AGS Management Organisation
NAPMA	NATO Airborne Early Warning and Communications Programme Management
NATAR	NATO Transatlantic Advance Radar Programme
NCC	National Coordination Centres
NCI	NATO Communication and Information Agency
NG	Northrop Grumman
NGISSII	NG Integrated Systems Sector International Incorporated
NSIP	NATO Security Investment Programme
PMOU	Programme Memorandum of Understanding
PoW	Programme of Work
RDU	Research and Development Unit
RfS	Request for Services
TED	Tender Electronic Daily system
PPO	Provisional Project Office
PCC	Prague Capabilities Commitments
RPPB	Resource Policy and Planning Board
SACEUR	Supreme Allied Commander Europe
SAR	Synthetic Aperture Radar
SSO	Supplemental Staff Office
SOSTAR	Standoff Surveillance and Target Acquisition Radar
SOP	Standard Operating Procedures
T's and C's	Terms and Conditions

Introduction

'Collaborative procurement is all about politics.' This comment from a retired general[1] belies rational, cost efficiency arguments for joint procurement activity. Politicians and academics criticise the lack of European security and defence assets available for multilateral missions.[2] Here, collaborative procurement would seem to be a potential solution. However, NATO and EU joint acquisition activity remains limited, with few successful programmes that can fill European capability gaps.[3] What is the key to drive more collaboration? Multilateral procurement poses a number of challenges, and compromises are required for successful outcomes. Member states have differing strategic objectives,[4] and technical and budgetary agreement is rarely sufficient to drive collaborative procurement to a successful conclusion. This is especially true where sovereignty over assets is sacrificed.[5] If one includes EU Commission or NATO organisation interests, then further complexities are introduced into decision-making. In sum, many agree that additional political and cultural alignment of interests must be

1. Interview with 011

2. TRUMP, D. 2017. Remarks by President Trump at NATO Unveiling of the Article 5 and Berlin Wall Memorials - Brussels, Belgium. Washington.; VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform.; GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.; PANETTA, L. E. 5 October 2011 2011. *RE: Remarks by Secretary Panetta at Carnegie Europe, Brussels, Belgium.*;

3. VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform.; GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.

4. BAILES, A. 2011. Europe's Security, Attitudes, Achievements and Unsolved Challenges. *In:* CROCKER, C., HAMPSON, F. O. & AALL, P. (eds.) *Rewiring Security in a Fragmented World.*

5. GIEGERICH, B. 2010. Budget Crunch: Implications for European Defence. *Survival,* 52**,** 87-98.

achieved for successful collaborative procurement.[6] Cultural contexts are linked to the Western security agenda and may vary as the agenda evolves and develops over time. Adherence to cultural contexts confers legitimacy, and in some cases prestige, to the procurement and this contributes to positive sentiments towards collaboration. In this way, sufficient political will[7] is generated to accept the required compromises. Organisational and cultural aspects involved in the generation of political will for collaborative procurement are not addressed by many studies. This thesis explores the social processes of collaboration. It considers the chain of decisions in multilateral acquisition concerning the requirement validity, funding priorities, choice of vendors and contract terms. It finds that both calculus and cultural explanations are relevant at different stages of the NATO and EU procurement processes. It concludes that cultural explanations deserve greater significance than has been attributed to them in past research. It challenges the basic assumption that successful collaboration follows from an emphasis on material objectives such as industrial participation (IP) and cost efficiency. It suggests that additional alignment with cultural (political and societal) contexts encourages and facilitates collaboration and collegiate dynamics within procurement decision-making.

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6. Ibid.; VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform.; GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.; JOANA, J. & SMITH, A. 2006. Changing french military procurement policy: The state, industry and 'Europe' in the case of the A400M. *West European Politics,* 29**,** 70-89.

7. An important theme of this thesis is that 'political will' (or support) is essential for collaborative procurement, and that cultural drivers are significant to generate that political will. This study uses the definition of 'political will' as the 'extent of committed support among key decision makers for a particular policy solution to a particular problem'.POST, L. A., RAILE, A. N. & RAILE, E. D. 2010. Defining political will. *Politics & Policy,* 38**,** 653-676.

The Western security environment has focussed on its border security for some time. This involves both traditional security and human security aspects. The EU witnessed increased levels of border control and surveillance activity because of the migration crisis and illegal border movements in transnational areas, such as the Mediterranean. This has led to expanded multilateral activity. There are a number of ongoing Western, multilateral surveillance operations and these include NATO's Operation Active Endeavour, that monitors the Mediterranean and is based at HQ MARCOM in Northwood. The EUNAVFOR MED Operation Sophia is based in Rome and monitors the Southern Central Mediterranean for human trafficking and migrant smuggling.[8] NATO's Operation Ocean Shield is a counter piracy mission and monitors the Gulf of Aden and Horn of Africa. EUNAVFOR's Operation Atalanta is the EU anti-piracy surveillance operation, monitoring the Gulf of Aden and the Horn of Africa. In the context of a renewed focus on how European states provide for their security, this research considers the drivers that encourage nations to collaborate to procure capabilities to support these and other missions. Specifically, how Western multilateral organisations (NATO and the EU) collaborate to procure surveillance capability. The research examines the drivers for *multilateral* aspects and the drivers for *surveillance* capability.

Collaborative acquisition is an area of academic interest that deserves attention because history is littered with its failed attempts to achieve cost savings and efficiencies.[9] It

8. EU COUNCIL 2017. EUNAVFOR MED Operation Sophia: mandate extended until 31 December 2018 (494/17). Brussels.

9. BRADDON, D. & HARTLEY, K. 2013. More for less? Exploring the Economic dimensions of multilateral collaboration in military aerospace projects. *Journal of Defense Studies & Resource*

deserves attention because future joint efforts are likely to continue due to rising costs of equipment, reduced defence and security budgets and the requirement for joint missions. Much existing literature concentrates on what restrains rational, collaborative procurement of defence and security assets, and largely focuses on the military sector.[10] This thesis adopts a fresh approach and identifies positive drivers for member state collaboration, via multilateral organisations, in procurement policy and acquisition of joint security capabilities. This research chose two relevant and valid case studies for collaboration in a similar Western security context, where the procurement organisation also performs the security function, thus introducing positive organisational factors for the acquisition of assets. Alongside rational choice, organisational theory and bureaucratic politics, the research broadens the scope of explanations to include institutionalism. Here, the thesis examines the contributions of strategic culture and political identity associated with multilateralism, the Western 'community of values' and 'civil military' security concepts,[11] to the social processes of collaboration. In the cultural and social context of procurement decisions, societies shape and define interests and capacities of social agents and community organisations.[12] The thesis argues that, while political support for collaborative procurement is partially achieved via bureaucratic politics and compromise, strategic culture and political imperatives relating

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Management, 2.2.; HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform.

10. GIEGERICH, B. 2010. Budget Crunch: Implications for European Defence. *Survival,* 52**,** 87-98.; GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.; VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform.

11. These ideas are expanded in the next section.

12. BARNETT, M. N. & FINNEMORE, M. 1999. The politics, power, and pathologies of international organizations. *International organization,* 53**,** 699-732.; ABBOTT, K. W. & SNIDAL, D. 1998. Why States Act through Formal International Organizations. *Journal of Conflict Resolution,* 42**,** 3-32.

to Western organisations and security solutions, are essential to overcome constraints in the process.

The military intervention in Libya in 2011 led to calls for NATO to increase its surveillance assets.[13] Yet NATO and the EU were already in the process of procuring surveillance infrastructure and capability. While NATO has had an aerial surveillance programme since the 1970s via its AWACs assets,[14] it has recently concluded negotiations for 13 partner states to acquire five Global Hawks and the related radar systems for its Alliance Ground Surveillance (AGS) project. The EU Commission has also procured surveillance infrastructure via its agency, Frontex.[15] The demand for, and expense of, the capability is likely to lead to further collaborative procurement of surveillance capability in the future.[16] The need for surveillance solutions is articulated in national security strategies,[17] in the security discourse of the EU and NATO,[18] and by

13. GRAND, C. 2012. Smart Defense and the Future of NATO: Can the Alliance Meet the Challenges of the Twenty-First Century? *Smart Defense:*. Chicago, Illinois.

14. http://www.nato.int/cps/en/natohq/topics_48904.htm Accessed October 2017

15. Frontex's full title is the European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union. The agency was set up in 2004 to reinforce and streamline cooperation between national border authorities.
http://frontex.europa.eu/assets/About_Frontex/frontex_regulation_en.pdf accessed November 2016

16. HAYES, B. & VERMEULEN, M. 2012. *Borderline: The EU's New Border Surveillance Initiatives: Assessing the Costs and Fundamental Rights Implications of EUROSUR and the" Smart Borders" Proposals: a Study by the Heinrich Böll Foundation*, Heinrich-Böll-Stiftung.

17. THE REPUBLIC OF FRANCE 2013. French White Paper, Defence and National Security.; UK MINISTRY OF DEFENCE 2003. UK Defence White Paper, Delivering Security in a Changing World. London: Her Majesty's Stationery Office.; GERMAN FEDERAL MINISTRY OF DEFENCE 2006. German White Paper 2006 on German Security Policy and the Future of the Bundeswehr.

18. NATO 2010b. Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization. Lisbon: NATO.; EU COUNCIL 2010. Internal Security Strategy for the European Union: 'Towards a European Security Model'. Brussels: Council of the European Union.

industry professionals, such as Northrop Grumman (NG).[19] While Western defence budgets are shrinking, expenditure in the security sector is growing (although it remains low in comparison to defence).[20] Transnational threats of terrorism, human trafficking and organised crime have intensified the imperative for surveillance capability, even though this solution does not address the root cause of the threats. Further, the EU has sponsored extensive research projects in this area via their Seventh Framework and Horizon 2020 Programmes.[21] The thesis focuses on the procurement of this particular capability (surveillance) in the context of civil military applications. While this limits the parameters of enquiry, it allows factors common to the procurement of a particular security solution to be identified in two very different case studies. In turn, parallel approaches can be adopted when considering drivers for collaborative procurement of other solutions. Here, cultural factors that compliment calculus rationales may increase the political will essential for successful collaboration.

Four aspects suggest that rational explanations are insufficient, and that additional drivers are needed, to generate political will for multilateral procurement of security capabilities. First, the sacrifice of sovereignty incurred through joint security functions and assets means that collaborative procurement is rarely the preferred option for member states.[22] Second, a rational premise for collaboration would suggest that *all* required assets would be bought jointly where costs could be saved. However, only a

19. TYLER, A. 2015. Tomorrow's Battles: Thinking about effect. *Jane's Defence Weekly*.

20. ANDERSON, G. 2014. M&A full-year report 2014. Ibid.

21. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; BIGO, D. & JEANDESBOZ, J. 2010. The EU and the European Security Industry, Questioning the 'Public-Private Dialogue'. *CEPS, IN:EX Policy Brief,* No.5.

22. GIEGERICH, B. 2010. Budget Crunch: Implications for European Defence. *Survival,* 52**,** 87-98.

few security solutions are successfully jointly procured. Therefore there are additional factors for certain security solutions to be prioritised over others. Third, diverging member state security objectives mean that consent for joint security solutions is difficult to obtain on a rational basis, and additional encouragement for political support is required. Fourth, both the EU and NATO, with 21 states overlap in the organisations, are pursuing similar procurement strategies and offering similar civil military security solutions for border security.[23] There are clearly some drivers regarding procurement of certain capabilities that encourage irrational duplication.

This research considers these four aspects and identifies positive drivers for procurement to answer the research question:

Is multilateral procurement of surveillance capability driven by calculus or culture?

Here, calculus encompasses rational, strategic and self-interested drivers, and culture embodies political and symbolic aspects that encourage member states to support multilateral procurement, these are defined in the following section.

23. MAULNY, J.-P. 2012. The Franco-British Treaty, The European Union's 'Pooling and sharing' and NATO's 'Smart Defence'; How can the different initiatives in terms of pooling capabilities be coordinated. Paris: IRIS.

Concepts and Definitions

There are a number of terms and concepts referred to throughout the thesis. This section clarifies the intended meaning of these. Here, terms used such as 'multilateral' and 'collaborative' procurement, 'surveillance capability' and 'calculus' and 'culture', and the adjectives 'political' and 'bureaucratic' are defined. First, the concept of strategic culture is outlined, and Western 'community of values', 'civil military' and 'multilateral' strategic cultures are explained.

'Strategic culture' is 'a number of shared beliefs, norms and ideas within a given society that generate specific expectations about the respective community's preferences and actions in security and defence policy.'[24] In this context, a community's security and defence identity, expressed through its preferences and behavioural patterns, derives from shared experiences and accepted narratives specific to a particular security community. Adherence to a strategic culture confers legitimacy into decision-making activities for collaborative policy and procurement. Thus multilateral organisations connected to a specific strategic culture gain legitimacy and prestige.[25] There are three strategic cultures that are associated with collaborative procurement of surveillance: the Western 'community of values', civil military security solutions and multilateralism.

The Western 'Community of Values' is a strategic culture upheld by both NATO and the EU. These cultural concerns represent the values that the West wants to proactively

24. BIEHL, H., GIEGERICH, B. & JONAS, A. 2013. *Strategic Cultures in Europe*, Springer. p.12

25. ABBOTT, K. W. & SNIDAL, D. 1998. Why States Act through Formal International Organizations. *Journal of Conflict Resolution,* 42**,** 3-32.

uphold[26]. They are rooted in Christian ideas of progress, civilisation, compassion and humanity[27] with an emphasis on human and civil rights.[28] Where political and academic commentators articulate these values, they inform and influence policy. The EU links to these values with Article 2 of the Lisbon Treaty specifically referring to fundamental rights:

> The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail.[29]

NATO also makes reference to these values in its published documents such as its Strategic Concept.[30] Articulation of the 'community of values' has been in evidence during the migration crisis, where commentators are concerned that the fundamental rights of migrants have not been addressed in the preferred security solutions.[31] Here,

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26. WAGNSSON, C. 2010. Divided power Europe: normative divergences among the EU 'big three'. *Journal of European Public Policy,* 17**,** 1089-1105.

27. MEYER, J. W., BOLI, J. & THOMAS, G. M. 1987. Ontology and Rationalization in the Western Cultural Account. *In:* THOMAS, G. M., MEYER, J. W., RAMIREZ, F. O. & BOLI, J. (eds.) *Institutional Structure Constituting State, Society and the Individual.* Newbury Park: Sage Publications.

28. PERKOWSKI, N. 2012. A normative assessment of the aims and practices of the European border management agency Frontex. Oxford: Refugees Studies Centre.

29.http://www.lisbon-treaty.org/wcm/the-lisbon-treaty/treaty-on-european-union-and-comments/title-1-common-provisions/2-article-2.html Accessed April 2018

30. NATO 2010b. Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization. Lisbon: NATO.

31. BIGO, D. & JEANDESBOZ, J. 2010. The EU and the European Security Industry, Questioning the 'Public-Private Dialogue'. *CEPS, IN:EX Policy Brief,* No.5.; AAS, K. F. & GUNDHUS, H. O. I. 2015.

there are allegations of militarised security solutions that prioritise political and industrial interests, and that overlook the input of NGOs and humanitarian bodies.[32] An important additional note is that the 'community of values' is related to a political identity of Western member states.[33] The idea was attributed to the values of democracy during the enlargement of both the EU and NATO and explored by academics such as Schimmelfennig.[34] Thus a sense of belonging and multilateralism is linked to the values of the Western community. EU and NATO represent this community[35] and cultural procurement drivers can be related to this.

The term 'civil military' refers to both assets and a strategic culture that straddle civil security and military functions. The term is adapted from an ECORYS study on civil military synergies[36] and is related to the term 'dual use'. 'Dual use' is used in academic and defence circles and refers to assets and technologies that are used for both civil and

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Policing Humanitarian Borderlands: Frontex, Human Rights and the Precariousness of Life. *The British Journal of Criminology,* 55**,** 1-18.; MAWDSLEY, J., BAILES, A. & DEPAUW, S. 2012. Towards a Merger of the European Defence and Security Markets. *Brussels: Flemish Peace Research Institute*. p.21

32. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; HAYES, B. & VERMEULEN, M. 2012. *Borderline: The EU's New Border Surveillance Initiatives: Assessing the Costs and Fundamental Rights Implications of EUROSUR and the" Smart Borders" Proposals: a Study by the Heinrich Böll Foundation*, Heinrich-Böll-Stiftung.

33. CANIVEZ, P. 2010. Review essay: Under consideration: Furio Cerutti and Sonia Lucarelli (eds), The search for a European identity: Values, policies and legitimacy of the European Union. *Philosophy & Social Criticism,* 36**,** 857-870.

34. SCHIMMELFENNIG, F. 2003. *The EU, NATO and the Integration of Europe*, Cambridge University Press. p.67

35. ABBOTT, K. W. & SNIDAL, D. 1998. Why States Act through Formal International Organizations. *Journal of Conflict Resolution,* 42**,** 3-32.

36. ECORYS 2012. Study on Civil Military Synergies in the field of Security. Rotterdam: European Commission DG Enterprise and Industry.

military applications.[37] Surveillance technology, equipment and capability often support both civil security and military functions, such as border security, maritime surveillance and infrastructure resource protection. These 'civil military' surveillance functions and capability straddle the 'civil security' and 'defence' categories. Civil military solutions address civil security issues such as terrorism and organised crime but may be performed by military actors. For example, the border control and surveillance is traditionally seen as a civil security function, but NATO, a military organisation, now articulates this as part of its mission.[38] The EU has a remit for border surveillance via its agency Frontex, a civil security Agency, but military actors from some member states may perform this function.[39]

Two additional aspects to civil military culture relate separately to the US and to European member states. First, Europe has a strategic culture that favours softer, civil security solutions over military or defence solutions. This is especially true compared to the US and is a stance that has been explored by academics.[40] Therefore, those making security policy often favour civil military solutions to purely defence solutions.[41]

37. EDMONDS, M., UTTLEY, M. & HAYHURST, G. 1990. UK and US dependence on foreign technology in defence research and development. *Science and Public Policy,* 17**,** 157-170.; UTTLEY, M. R. 1995. The integration of West European defense procurement: Issues and prospects*. *Defense Analysis,* 11**,** 279-291.

38. See: http://www.nato.int/cps/en/natolive/topics_48892.htm Accessed September 2017

39. LUTTERBECK, D. 2006. Policing Migration in the Mediterranean: ESSAY. *Mediterranean politics,* 11**,** 59-82.

40. ZYLA, B. 2015. Untying the Knot? Assessing the compatibility of the American and European strategic culture under President Obama. *Innovation: The European Journal of Social Science Research,* 28**,** 104-126.; LINDLEY-FRENCH, J. 2004. The Revolution in Security Affairs: Hard and Soft Security Dynamics in the 21st Century. *European Security,* 13**,** 1-15.

41. MAWDSLEY, J. 2013b. A European Agenda for Security Technology: From Innovation Policy to Export Controls. *Flemish Peace Institute, Report.*

Second, some civil security capabilities, such as surveillance, have been affected by the US Revolution in Military Affairs (RMA) culture and are linked to a militarised civil security culture.[42] RMA emerged post Operation Desert Storm in 1991 and refers to an evolution of weapons technology[43] and operational concepts among advanced powers. It focuses on the changes made possible by advanced information technology,[44] which is used to achieve radically greater levels of efficiency.[45] In a military context, RMA represents systems that provide 'capability for all weather/night high tempo 'hyperwar' operations' of which surveillance is a component.[46] Thus, RMA is linked to 'advanced powers' and levels of prestige related to sophisticated surveillance equipment which is part of 'dominant battle space knowledge'.[47] This has implications for the choice of surveillance as a security solution, where capability that was originally associated with the RMA is adapted for a civil security context.[48] It explains technical imperatives for the acquisition and use of sophisticated military surveillance assets in civil security functions in some circumstances, which could be counted as irrational where less sophisticated assets could perform a similar role.

42. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.

43. ATTINA ATTINÀ, F. 2004. The Building of Regional Security Partnership and the Security Culture Divide in the Mediterranean Region.

44. GALDI, T. W. 1995. Revolution in Military Affairs? Competing Concepts, Organisational Responses, Outstanding Issues. Washington: Congressional Report Service.

45. GRANT, R. P. 2000. *The RMA: Europe Can Keep in Step*, Institute for Securities Studies, Western European Union. p.3

46. ZARZECKI, T. W. 2002. *Arms Diffusion: The Spread of Military Innovations in the International System*, Psychology Press.

47. GRANT, R. P. 2000. *The RMA: Europe Can Keep in Step*, Institute for Securities Studies, Western European Union.

48. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.

'Multilateral' refers to the multinational nature of the contracts where member states collaborate in the procurement process via NATO and the EU agency 'Frontex'. 'Multilateralism' is associated with Western strategic cultures and with NATO and EU organisations. Here, ideas of Western identity and security community are represented by these organisations and affect member state behaviour.[49] Ruggie considered the concept and noted that 'multilateralism in security relations refers to collective security or self defense. Multilateralism coordinates policies on the basis of certain principles of ordering relations'.[50] Caporaso takes this a step further and considers the demanding 'multilateral' organisational form where member states renounce temporary advantages, and do not make decisions based on exact calculations of costs and benefits in the short term.[51] Rather they accept a 'diffuse reciprocity' where they expect to benefit in the long run, via arrangements such as multilateral procurement.[52]

In this thesis 'collaborative' procurement generally refers to that joint action required to *acquire* the equipment or capability, rather than *develop* the capability. Much literature addresses the implications of collaborative development and production among two or more states. These maybe for national use, for example the Eurofighter Typhoon fighter aircraft.[53] Or for a multinational unit, for example EU member states have jointly developed the Galileo system (a global civil satellite navigation system), via the

49. RUGGIE, J. G. 1998. What Makes the World Hang Together? Neo-Utilitarianism and the Social Constructivist Challenge. *International Organization,* 52**,** 855-885. p.877

50. RUGGIE, J. G. 1993. *Multilateralism matters: The theory and praxis of an institutional form*, Columbia University Press. p.7

51. CAPORASO, J. A. 1992. International relations theory and multilateralism: the search for foundations. *International Organization,* 46**,** 599-632.

52. Ibid.

53. https://www.eurofighter.com/customers Accessed September 2018

European Space Agency and the EU Commission since 1999.[54] This thesis does *not* address the development aspect of collaborative procurement that can add considerable emphasis on national participation due to the technical expertise that can be gained from the development phase.[55] The phenomenon under study here is the multinational procurement of a system largely developed. As such, reference and comparison is made to examples of past multinational 'off-the-shelf' procurements such as NATO's AWACs. This means that there is less proprietary technical knowledge to be gained in the acquisition by member states who are not party to the development aspects of the assets.

This thesis refers to 'surveillance capability' as those functions that relate to the gathering of information for risk assessment, including information networks. NATO defines surveillance as 'the systematic observation of aerospace, surface or sub-surface areas, places, persons or things by visual, aural, electronic, photographic or other means'.[56] In the context of NATO and Frontex it is also associated with 'intelligence collection': 'The exploitation of sources by collection agencies and the delivery of the information obtained to the appropriate processing unit for use in the production of intelligence'.[57] The Eurosur regulation broadens the scope of surveillance in the context of borders as 'including the monitoring, detection, identification, tracking, prevention

54. http://ec.europa.eu/growth/sectors/space/galileo/history_en Accessed September 2018

55. HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform. p.23; AUDITORS, E. C. O. 2009. The Management of the Galileo Programme's Development and Validation Phase. Luxembourg.

56. NATO 2005a. NATO Intelligence, Surveillance, and Reconnaissance (ISR) Interoperability Architecture (NIIA); Volume 4: NIIA Terms and Definitions. Allied Engineering Documentation Publication.

57. Ibid.

and interception of unauthorised border crossings'.[58] The thesis does not consider the 'prevention and interception of unauthorised border crossings' but otherwise refers to the above definitions and the capability required to perform surveillance under these definitions as 'surveillance capability'.

Definitions of 'calculus and culture' reflect the nature of the drivers behind the procurement. Hall and Taylor refer to the term 'calculus' and 'culture' in their seminal article '*Political Science and the Three New Institutionalisms*'.[59] 'Calculus' entails instrumental behaviour where actors make strategic decisions in their material interests: 'Individuals seek to maximise the attainment of a set of goals given by a specific preference function', 'they canvas all possible options to select those conferring maximum benefit'.[60] This is linked to strategic choice and bureaucratic models where actors behave according to their self-interest. Calculus drivers for procurement can be generated via a rational response to a security issue. However, other less rational, calculus drivers exist. For example, organisation drivers for role expansion may encourage procurement for a capability to legitimise expansion or assertion of a security role.[61] Equally, member state industrial imperatives may provide a calculus driver for procurement of certain security solutions that suit an industrial policy rather than a security policy.

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58. EU COMMISSION 2013b. REGULATION (EU) No 1052/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the European Border Surveillance System, Eurosur. Brussels: Official Journal of the European Union.

59. HALL, P. A. & TAYLOR, R. C. R. 1996. Political Science and the Three New Institutionalisms. *Political Studies,* 44**,** 936-957.

60. Ibid. p.7

61. BARNETT, M. N. & FINNEMORE, M. 1999. The politics, power, and pathologies of international organizations. *International organization,* 53**,** 699-732.

Contrastingly, 'culture' refers to ideas and social factors that affect decision-making behaviour via a worldview or organisation environment.[62] This thesis refers to Anne Swidler's definition that culture 'consists of such symbolic vehicles of meaning, including beliefs, ritual practices, art forms, and ceremonies as well as informal cultural practices such as language, gossip, stories and rituals of daily life'. These symbolic forms are the means through which these modes of behaviour and outlook within a community are socially processed.[63] This research considers civil military culture, multilateralism, and the demands of the Western 'community of values' as they affect preferences for procurement outcomes in multilateral organisations. Prestige also fits with ideas of culture, where a socially constructed idea of status becomes associated with technical imperatives for a particular, sophisticated capability, such as methods of surveillance and intelligence collection via satellite pictures and unmanned drones. Eyre and Suchman assert that the demand for certain security capability is 'driven and shaped by institutionalized normative structures linking [capabilities][64] with modernization and social legitimacy'. 'This emphasizes the role of world cultural models that 'press all countries towards common objectives, forms and practices'.[65] 'Cultural' arguments may

62. KIER, E. 1999. *Imagining war: French and British military doctrine between the wars*, Princeton University Press Princeton.

63. SWIDLER, A. 1986. Culture in Action: Symbols and Strategies. *American Sociological Review,* 51**,** 273-286.

64. Author insert

65. EYRE, D. P. & SUCHMAN, M. C. 1996. Status, norms, and the proliferation of conventional weapons: An institutional theory approach. *In:* KATZENSTEIN, P. J. (ed.) *The Culture of National Security: Norms and Identity in World Politics.*

be used strategically for 'calculus' objectives,[66] and these ideas are fully explored in the chapters below.

Finally, there are two adjectives used throughout the thesis that deserve clarification: 'political' and 'bureaucratic'. The adjective 'political' is used in this thesis to indicate where political elites are involved in the decision-making process and act with an agenda that relates to a political context, either domestic or international.[67] This use of 'political' must be distinguished from those actions, sometimes referred to as 'political', that relate to power and status in a smaller, non-elite, organisation context or from disagreements between two non-elite parties. The adjective 'bureaucratic' is used throughout the study to simply refer to the organisation characteristics of NATO and EU, such as structure, practices and processes.[68] It is *not* used as a negative term and does not refer to inefficiencies that are sometimes associated with a bureaucracy.

Literature Review

This review considers the literature that addresses important themes of the research: collaborative procurement, organisation decision-making and strategic culture. Collaborative procurement literature frequently analyses procurement decision-making through the lens of rational choice, and focuses on the military and defence sector. The review draws in an additional body of literature that considers EU procurement of security activities via its exploration of the securitisation of EU surveillance practices

66. SCHIMMELFENNIG, F. 2003. *The EU, NATO and the Integration of Europe*, Cambridge University Press.;

67. https://www.merriam-webster.com/dictionary/political Accessed September 2018

68. https://www.merriam-webster.com/dictionary/bureaucratic Accessed September 2018

and in particular border surveillance. The review considers this collaborative procurement literature and attempts to address the gaps. First, regarding organisational analysis of collaborative procurement policy, and second identifying cultural explanations for joint procurement of surveillance. Then the review outlines literature concerned with the bureaucracies of NATO and the EU Commission, as they relate to procurement decision-making. It demonstrates that, while there are some existing studies on the different roles of NATO and the EU, there is little comparative research on the security bureaucracies of the organisations, particularly with respect to specific decision-making activities, such as procurement. Finally, the review also considers literature concerning strategic cultures that influence procurement processes and reflects societal expectations generated from the Western 'community of values' and civil military culture. There is little literature that specifically considers multilateralism and procurement, the review notes where references are made to this driver in existing studies.

Security and Defence Procurement

A starting point to consider drivers for security procurement is Barry Buzan's *The Arms Dynamic in World Politics.*[69] While Buzan focusses on the technological imperative in the defence sector, his explanations for the arms dynamic encapsulate a broad range of political and organisational drivers that are applicable to procurement in most contexts, including collaborative procurement in organisations. Buzan refers to the 'arms dynamic' as the 'sets of pressures that make actors.... Both acquire armed forces and change the quantity and quality of the armed forces that they already possess.'[70] The

69. BUZAN, B. & HERRING, E. 1998. *The Arms Dynamic in World Politics*, Lynne Rienner Publishers.
70. Ibid. p.79

'action reaction' model refers to an external threat generating the pressures for procurement;[71] the 'domestic structure' model refers to pressures originating from within the state. These include organisational pressures that are as applicable in a collaborative context as in a general context. Buzan includes both symbolic and identity drivers that relate to culture in his explanations of procurement.[72] Importantly for this research he refers to Scott's 'open systems' theory, which relates organisations to sets of societal rules and cultures, and 'natural systems' theory, which relates to organisational survival drivers. These theories provide an explanation for the links between the macro and micro context to organisation decision-making. However, Buzan concentrates on a national, rather than international, context and articulates a very broad approach to procurement. He does not consider the social processes of collaboration in any great detail. This thesis draws upon elements of Buzan's arguments, notably their establishment of drivers. It expands the environment to a multilateral, international situation and focuses on how the organisation processes and decision-making reflects this context.

The collaborative procurement literature that is relevant to this thesis may be divided into two subsets: first, collaborative defence literature; and second, that literature that considers the, predominantly EU, industrial relationships, securitisation and purchase of border security and surveillance capability. The defence and civil military sectors are generally treated differently in the literature. NATO is associated with the defence sector that is often analysed through a realist lens. The EU Commission is associated with civil security and often analysed via a cultural approach. This thesis aims to bridge

71. Ibid. p.87

72. Ibid. p.110 and p.179

these two approaches when considering the organisations' bureaucratic decision-making, drawing attention to parallel cultural drivers for the procurement of a particular capability, surveillance.

The subset of 'collaborative' defence procurement literature often approaches procurement through a realist lens.[73] This approach emphasises the rational aspects of collaboration. The literature also tends to focus on policy level decisions for procurement, rather than decision-making within organisations. These works refer to rational and strategic (calculus) drivers for collaborative procurement such as cost efficiency drivers, the primary, strategic reason for most initiatives. National defence industries are jealously guarded and participation in multinational projects is traditionally seen as a source of business and technological transfer for national defence industry: 'Governments in Europe are concerned about the economic as well as the military, impact of defence spending'.[74] Hartley and Braddon consider a broad overview of collaborative defence acquisition.[75] Hartley notes that nations join collaborative

73. DEVORE, M. R. & WEISS, M. 2013. Who's in the cockpit? The political economy of collaborative aircraft decisions. *Review of International Political Economy,* 21**,** 497-533.; BRADDON, D. & HARTLEY, K. 2013. More for less? Exploring the Economic dimensions of multilateral collaboration in military aerospace projects. *Journal of Defense Studies & Resource Management,* 2.2.; HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform.; GIEGERICH, B. 2010. Budget Crunch: Implications for European Defence. *Survival,* 52**,** 87-98.; GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.

74. TAYLOR, T. 2012. NATO's Customer and Facilitator Roles in Defence Equipment Co-operation. *In:* ARONSSON, L. & LOUTH, J. (eds.) *Reflections on Industry's Contributions to Smart Defence.* London: RUSI.

75. HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform.; BRADDON, D. & HARTLEY, K. 2013.

programmes if economic and non-economic benefits are superior to a nationally independent programme.[76] His study considers inefficiencies in procurement processes, and asks why governments continue with collaborative programmes. His conclusions include bureaucratic drivers for procurement, that, 'once started, collaborative programmes are difficult to stop'.[77] This is due to the formation of interest groups that include 'bureaucracies, politicians, scientists, armed forces and producer industries'.[78] These interest groups generate the 'industrial imperative' driver, also known as *juste retour* or the military industrial complex.[79] Marc DeVore considers collaboration for aerospace procurement and also considers the subject from an economic perspective.[80] He seeks explanations for the lack of economic benefits and cost savings from collaboration in the defence aerospace sector, and looks to principal agent and collaborative action theories for answers. His article 'Who's in the Cockpit'[81] also tackles collaboration for aerospace procurement from a economic approach, using the 'varieties of capitalism' theory. This literature does not consider the social processes of collaborative procurement and additional societal input into the decisions during the procurement process.

More for less? Exploring the Economic dimensions of multilateral collaboration in military aerospace projects. *Journal of Defense Studies & Resource Management,* 2.2.

76. HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform. p.19

77. Ibid. p.18

78. Ibid. p.20

79. Ibid. p.21

80. DEVORE, M. R. 2011. The Arms Collaboration Dilemma: Between Principal-Agent Dynamics and Collective Action Problems. *Security Studies,* 20**,** 624-662.; DEVORE, M. R. & WEISS, M. 2013. Who's in the cockpit? The political economy of collaborative aircraft decisions. *Review of International Political Economy,* 21**,** 497-533.

81. DEVORE, M. R. & WEISS, M. 2013. Who's in the cockpit? The political economy of collaborative aircraft decisions. *Review of International Political Economy,* 21**,** 497-533.

The collaborative procurement literature carries over its rational and economic perspective when it considers organisation influences on procurement. This is true of existing studies of NATO and EU procurement activity.[82] Both Matthew Uttley and Marc DeVore consider historic developments in defence procurement organisations.[83] Uttley's article considers the potential for cooperation in Europe and notes the difficulties that cooperation faces given member state demands for collaborative procurement efficiency versus returns for their industries. DeVore's comprehensive overview of the history of armaments cooperation organisations examines how the structure of collaborative procurement organisations has evolved over time.[84] He concludes that organisation focus has moved from functionalism (and officials with expertise) to a political emphasis (involving defence ministers) to aid decision-making. This means that external influences become more important as a political stance includes societal input. DeVore finishes his organisation analysis by considering the EU Commission and the EDA as procurement organisations. He notes the power that these

82. TAYLOR, T. 2012. NATO's Customer and Facilitator Roles in Defence Equipment Co-operation. *In:* ARONSSON, L. & LOUTH, J. (eds.) *Reflections on Industry's Contributions to Smart Defence.* London: RUSI.; FALEG, G. & GIOVANNINI, A. 2012. The EU between Pooling and Sharing and Smart Defence. *Making a virtue a necessity*.; GIEGERICH, B. 2012. NATO's Smart Defence: Who's Buying? *Survival,* 54**,** 69-77.; MAULNY, J.-P. 2012. The Franco-British Treaty, The European Union's 'Pooling and sharing' and NATO's 'Smart Defence'; How can the different initiatives in terms of pooling capabilities be coordinated. Paris: IRIS.

83. UTTLEY, M. R. 1995. The integration of West European defense procurement: Issues and prospects*. *Defense Analysis,* 11**,** 279-291.; DEVORE, M. R. 2012. Organizing international armaments cooperation: institutional design and path dependencies in Europe. *European Security,* 21**,** 432-458.

84. DEVORE, M. R. 2012. Organizing international armaments cooperation: institutional design and path dependencies in Europe. *European Security,* 21**,** 432-458.

supranational organisations have, as they focussed not on who was representing member states, but how they could achieve their objectives.[85]

Arnold Tessmer's *Politics of Compromise: NATO and AWACs*[86] gives an insight into the political workings of NATO procurement and the processes of US persuasion tactics with NATO member states. This is a fascinating story of the bargaining processes behind NATO's procurement of a surveillance capability. This work is relevant in that it concerns member state behavioural processes of procurement, but it does not consider NATO's influence as an organisation actor. NATO is mentioned as an honest broker, but there are no implications or analysis beyond this. Jack Nelson's 2014 thesis *Alliance Ground Surveillance and the Future of NATO's Smart Defence*,[87] was written under the supervision of David Yost, a renowned NATO scholar. This thesis considers the history of the multilateral AGS Programme from the perspective of Smart Defence and NATO's strategic imperatives. Nelson suggests that the Programme has been acquired in part 'out of loyalty and deference to the United States'[88] and NATO rather than for rational motives such as access to useful equipment. Nelson concludes that the AGS acquisition programme can be viewed as a measured success alongside its symbolic relevance for political cohesion,[89] but doesn't consider NATO bureaucratic structures or strategic cultural influences in his analysis.

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85. Ibid. p.447

86. TESSMER, A. L. 1988. *Politics of Compromise: NATO and AWACs,* Washington DC, National Defense University Press.

87. NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School.

88. Ibid. p.33

89. Ibid. p.64

Academic literature does note that, alongside efficiency objectives, political willingness is an essential aspect of collaborative defence procurement. Giegerich considers different methods of collaboration in both defence and security capabilities, such as EU satellite operations based in Spain.[90] He does not explore the specific bureaucratic processes but provides a general overview of options, such as pooling and sharing, and the benefits and the costs of collaboration. He mentions political incentives for defence procurement collaboration such as political cohesion and common outlook on security policy, and notes that these are often outweighed by the required sacrifice of national autonomy. Giegerich focuses on the inefficiencies of programmes such as the A400M aircraft and NH90 Helicopters, pointing to reasons such as juste retour and multi-principal, complex decision-making. His approach is largely rational and strategic and at a policy level rather than considering specific contracts. His coedited volume *Strategic Cultures in Europe* also acknowledges that strategic culture can affect collaborative procurement efforts, but there is little exploration of how this might manifest in practice.[91] He also notes that the diversity in strategic culture might hinder cooperation. Valášek also notes ideational components of joint acquisition such as strategic culture, trust and solidarity.[92] He does not look to how this is realised within organisations, but merely comments that lack of these aspects hinders collaborative procurement efficiency. Jean Pierre Maulny[93] compares different, multilateral procurement initiatives, including those of the EU and NATO, and notes the overlap

90. GIEGERICH, B. 2010. Budget Crunch: Implications for European Defence. *Survival,* 52**,** 87-98.

91. BIEHL, H., GIEGERICH, B. & JONAS, A. 2013. *Strategic Cultures in Europe*, Springer. p.395

92. VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform. p.21

93. MAULNY, J.-P. 2012. The Franco-British Treaty, The European Union's 'Pooling and sharing' and NATO's 'Smart Defence'; How can the different initiatives in terms of pooling capabilities be coordinated. Paris: IRIS.

between the programmes and the lack of political coordination. He cautions that the procurement initiatives will not be successful unless there is political will to cede sovereignty agreed on an international basis. Goure also analyses NATO initiatives and also points to an inability of European member states to agree to common threats and to cede any sovereignty over assets.[94] He notes a lack of political trust and strategic divergence within NATO member states over sharing defence assets. Amongst his general criticisms of European member states defence capabilities, Goure particularly comments on the lack of Intelligence, Surveillance and Reconnaissance (ISR) capabilities.[95] He asserts that political will needs to come from societal endorsement and a strategic culture for additional defence procurement. However, his analysis remains on the political and broad based policy level, and he does not analyse NATO bureaucracy for explanations of how the political support may be generated or realised. Goure concludes that European military strategic culture is ambivalent towards defence spending and that future investment strategies need to be political.[96] This reference to strategic culture is made in passing and is not explored in any great detail.

In general, these studies relate to a military context, and do not consider cultural influences on procurement, such as the Western community of values or a 'civil military' strategic culture. Although they acknowledge the importance of political will, they do not explore how this may be generated. They do not consider how cultural influences are reflected in the bureaucracies of NATO and the EU and their procurement policies and processes. Katzenstein addresses cultural aspects of security, and the 'cultural-

94. GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.

95. Ibid. p.45

96. Ibid. p.84

institutional' context of state behaviour.[97] He, and others, note that international cultural environments not only include international organisations, but also that a world political discourse affects security policy.[98] In Katzenstein's edited volume, Eyre and Suchman consider normative, cultural influences on weapons procurement in developing countries for prestige weapons in determining their modern state identity.[99] This approach demonstrates motives for procurement that do not relate to rational requirement for the assets, but that are socially generated in relation to norms of a strategic culture. Joana and Smith also study collaborative procurement partially through a cultural lens, and conclude that politics and strategic culture play an important part in procurement of the A400M.[100] Their study focuses on the 'social representations of reality' as they affect procurement policies. They note that, in the context of military procurement, the need for the A400M was defined via 'a politicised commitment to European co-operation' as well as industrial imperatives in the arms sector. They consider how European states construct their preferences for the A400M action. Here, actors' actions are constrained by sets of roles, rules and expectations in an 'ideational framework that is cognitive, normative and symbolic', and the need for a successful European joint venture was prioritised over industrial and operational goals.[101] This thesis takes the cultural premise

97. KATZENSTEIN, P. J. 1996. *The Culture of National Security: Norms and identity in World Politics*, Columbia University Press.

98. JEPPERSON, R. L., WENDT, A. & KATZENSTEIN, P. J. 1996. Norms, identity, and culture in national security. *In:* KATZENSTEIN, P. J. (ed.) *The culture of national security: Norms and identity in world politics.* Columbia University Press. p.34

99. EYRE, D. P. & SUCHMAN, M. C. 1996. Status, norms, and the proliferation of conventional weapons: An institutional theory approach. *In:* KATZENSTEIN, P. J. (ed.) *The Culture of National Security: Norms and Identity in World Politics.*

100. JOANA, J. & SMITH, A. 2006. Changing french military procurement policy: The state, industry and 'Europe' in the case of the A400M. *West European Politics,* 29**,** 70-89. p.73

101. Ibid. p.73

and links it to European adherence to civil military security norms in their procurement practices. These may relate to a European emphasis on civil security over defence. The research finds that there is a gap in the literature with regard to linking collaborative defence and security procurement to this context. Further, many works focus on the military and defence sector rather than the civil military sector.

The second core body of literature relevant to the thesis considers the securitisation of EU border surveillance. Here the scholarship often includes the procurement activities associated with the securitisation. In the main these relate to the procurement of the EU's research programmes as there has not been much joint procurement of surveillance capability until the Frontex contracts in this study. Mark Akkerman has also commented on NATO activity in the Mediterranean, alleging that the Alliance's push back policy regarding migrants violates human rights.[102] This literature is different to the collaborative defence literature in that it makes specific reference to the cultural input of industrial and government actors. It is generated from the 'community of values' culture that prioritises human rights over securitised responses and criticises civil military, border security solutions as being related to industrial imperatives. The literature is significant as it criticises institutional behaviour and alters attitudes and behaviour in procurement activity. Here societal, cultural empathy with the criticism means that the literature generates political pressure.[103] The literature tends to be critical of the EU's approach, in particular, to the functions of border surveillance in the context of the migration crisis. Didier Bigo and Julian Jeandesboz criticise the EU's approach to

102. AKKERMAN, M. 2017. NATO and EU border security in the Mediterranean. *Stop Wapenhandel*.

103. HEIDENKAMP, H., LOUTH, J. & TAYLOR, T. 2011. The Defence Industrial Ecosystem, Delivering Security in an Uncertain World. *In:* RUSI (ed.). London: RUSI. p.16

its FP7 research programme, and allege that it prioritised industry input into security solutions, at the expense of input from NGO and other humanitarian bodies.[104] This analysis is based on research programme contracts, rather than procurement activity for actual functions, but is relevant to EU interaction with industrial actors.

Ben Hayes is highly critical of the surveillance culture. He examines the relationship between industry actors and EU policy makers.[105] His work is concerned with the civil liberty implications of a security industrial complex. Hayes specifically refers to the militarising influence of the US RMA, NATO, and the concept of homeland security on border security measures.[106] He is critical of industrial influence, but provides little evidence of this in actual procurement practices relating to current border surveillance practices. Hayes' study considers the behaviour of the Commission regarding the FP7 research programme and explicitly links industrial figures, and military influences such as NATO, with policy formation and the procurement of research projects. Mark Akkerman also alleges that industrial involvement with policy making and the procurement of research programmes is prioritised over migrants' human rights.[107] He makes just one reference to Frontex contracts and does not follow up with any detailed analysis of bureaucratic decision-making, or come to any conclusions as to the procurement outcomes. This approach to border security affects organisation and

104. BIGO, D., JEANDESBOZ, J., MARTIN-MAZE, M. & RAGAZZI, F. 2014. Review of Security Measures in the 7th Research Framework Programme FP7 2007-2013. *Study for the LIBE Committee.* Brussels: European Parliament.; BIGO, D. & JEANDESBOZ, J. 2010. The EU and the European Security Industry, Questioning the 'Public-Private Dialogue'. *CEPS, IN:EX Policy Brief,* No.5.

105. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.

106. Ibid. p.8

107. AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.

procurement activity even when it does not directly concern contracting. Sarah Léonard's article regarding the securitisation of Frontex border surveillance practices describes the criticisms of human rights activists and NGO's.[108] This article does not address procurement concerns but reflects the 'community of values' approach to Frontex activities. She notes that although migration is framed as a humanitarian issue in EU institutions, the practices of Frontex convert the issue to one of security. This is achieved by deploying measures that would be used for a security problem, and by framing the migration crisis as an 'exceptional' situation and therefore generating a crisis response. She notes that Frontex has also developed relationships with private sector companies that provide security solutions, in order to provide solutions for the migration crisis. It is also involved with policy-making bodies regarding future research and development concerning border surveillance. Thus it is indirectly implicated with research into surveillance solutions chosen and developed by the EU research programmes.

This thesis considers this body of literature important for EU and NATO decision-making for procurement of joint activities. Most criticism regarding suppression of civil rights is related to the activities of the EU. This is partly because there is more information about the EU that is easier to access, but also because of the EU's Parliamentary tradition of upholding human rights.[109] Criticism of NATO procurement practices is referred to in the collaborative procurement section above. As indicated, it tends to be related to realist, functionalist and economic approaches. It also focuses on

108. LÉONARD, S. 2010. EU border security and migration into the European Union: FRONTEX and securitisation through practices. *European Security,* 19**,** 231-254.

109. PERKOWSKI, N. 2012. A normative assessment of the aims and practices of the European border management agency Frontex. Oxford: Refugees Studies Centre.

industrial imperatives, but relates these to the *inefficiency* of the Alliance's procurement practices.[110] This approach is less emotive, does not relate to societal culture and carries less political weight. In summary, the two bodies of literature (collaborative procurement and securitisation of border surveillance practices) warn of close contacts between industry, member states and the organisations involved in security procurement. However, they are associated with differing levels of political weight. Thus in the case of the EU oriented criticism, this affects attitudes and approaches to procurement practices. In contrast, the dry economic approaches and criticism of NATO do not resonate in the same way with societal imperatives or carry sufficient political weight to affect discipline for rational drivers within procurement processes.

While the scholarship above is focussed on joint procurement, two further bodies of literature considered below also inform the thesis: Multilateral organisation bureaucracy and culture literature; and Strategic culture literature. These are now considered for their contribution to the analysis of organisation decision-making for the joint procurement of surveillance.

Organisation Bureaucracy and Culture

An important theme for the research is organisational influence on procurement. Allison's well-known, bureaucratic decision-making models[111] are often referred to in

110. GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.; HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform.

111. ALLISON, G. T. & MORRIS, F. A. 1975. Armaments and Arms Control: Exploring the Determinants of Military Weapons. *Daedalus,* 104**,** 99-129.

explanations of procurement,[112] but few studies address the complexities of multilateral bureaucracy and organisational decision-making. The literature considered here studies bureaucratic decision-making rather than procurement specifically. It demonstrates how organisational staff and structure affect decision-making, distracting from member state objectives, and enhances other influences such as organisation role expansion, industrial imperatives or cultural influences. The role of NATO and EU bureaucracy is considered in Sebastian Mayer's *Embedded Politics, Growing Informalisation? How NATO and the EU Transform the Provision of External Security.*[113] Mayer introduces the concept of 'embedded security politics' where fragmented responsibilities and pressure for consensus alter preferences towards organisational arrangements. He asserts that organisations have taken on a greater role in security via 'internationalisation', a process that takes place in multilateral bureaucracies.[114] Mayer considers how bureaucracies affect member state decision-making, and offers examples of 'multi-nationalisation' of forces and asset pooling as evidence of internationalisation. He continues this line of enquiry in his edited volume, *NATO's Post Cold War Politics - The Changing Provision of Security.*[115] This considers various perspectives of the NATO organisation, from

112. CUSUMANO, E. & KINSEY, C. 2014. Bureaucratic Interests and the Outsourcing of Security: The Privatization of Diplomatic Protection in the United States and the United Kingdom. *Armed Forces & Society*.; AUSTIN SMITH, R. 1973. TFX: The $7-billion Contract That Changed the Rules. *In:* HALPERIN, M. H. & KANTER, A. (eds.) *Readings in American Foreign Policy: A bureaucratic perspective.* Boston: Little Brown & Co.; SORENSON, D. S. 2008. *The Process and Politics of Defense Acquisition,* Westport, Praeger Security International.

113. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

114. Internationalisation is where national processes shift to an international organisation and enhances their significance.

115. MAYER, S. (ed.) 2014b. *NATO's Post Cold War Politics - the Changing Provision of Security,* Hampshire: Palgrave Macmillan.

Gade's chapter on the changing nature of NATO's Military Staff working practices,[116] to Michel's study of NATO's decision-making.[117] Gade suggests that after NATO reforms, there is more civilian input into NATO processes via the civilian International Staff.[118] Michel suggests that NATO's laborious formal decision-making processes means that alternative informal decision-making routes allow for other additional, external input, thus diluting military influence. Generally, the volume explores how influences on decision-making have evolved as working practices in NATO have changed.

Reinalda and Verbeek's *Decision-making in International Organisations*[119] considers the delivery of cultural dynamics by bringing together bureaucratic politics and constructivist explanations. Here they assert that international organisations' structure and bureaucracy form opportunities for cultural influences to enter decision-making processes.[120] In this volume, Trondal emphasises the concept of supranational loyalties versus intergovernmental loyalties in decision-making.[121] He comments on the multiple roles and identities within the EU, especially on supranational identities. Trondal and

116. GADE, J. G. & HILDE, P. S. 2014. Enduring Rules, Changing Practices: NATO's Post-Cold War Military Committee and International Military Staff. *In:* MAYER, S. (ed.) *NATO's Post Cold War Politics, The Changing Provision of Security.* Basingstoke, UK: Palgrave Macmillan.

117. MICHEL, L. 2014. NATO Decision-Making: The 'Consensus Rule' Endures Despite Challenges. *In:* MAYER, S. (ed.) *NATO's Post War Politics, The Changing Provision of Security.* Basingstoke, UK: Palgrave Macmillan.

118. GADE, J. G. & HILDE, P. S. 2014. Enduring Rules, Changing Practices: NATO's Post-Cold War Military Committee and International Military Staff. *In:* MAYER, S. (ed.) *NATO's Post Cold War Politics, The Changing Provision of Security.* Basingstoke, UK: Palgrave Macmillan.

119. REINALDA, B. & VERBEEK, B. 2004. *Decision Making Within International Organizations,* Abingdon, ROUTLEDGE ECPR STUDIES IN EUROPEAN POLITICAL SCIENCE.

120. Ibid. p.26

121. TRONDAL, J. 2004. Institutionalist Perspective on EU decision making. *In:* REINALDA, B. & VERBEEK, B. (eds.) *Decision Making Within International Organisations.* Abingdon: Routledge.

Marcussen *et al* update and expand this line of enquiry and consider how intergovernmental dynamics are 'transcended or supplanted by supranational, departmental or epistemic dynamics'.[122] While the focus on decision-making is general, rather than security oriented or procurement specific, the dynamics may be transferred to a procurement context and expanded to include NATO alongside the EU.

The review will now consider analysis of two strategic cultures, the Western community of values, and civil military security. It further notes that these cultures have influenced a body of critical literature regarding the EU, and to a lesser extent, NATO.

Strategic Culture

The Western 'community of values' is a cultural influence well documented in the literature. The thesis refers to this literature for its impact on procurement decisions. After the expansion of the EU and NATO in the early 2000's, a number of studies considered how the organisations represented and promulgated norms of democracy and human rights.[123] Schimmelfennig's study of the expansion of membership of the EU and NATO considers cultural arguments of conformity to 'community rules'. He concludes that cultural explanations can be used for the high level decisions for enlargement, but that egoistic preferences and strategic action also affected decision-

122. MARCUSSEN, M., TRONDAL, J., VEGGELAND, F. & LARSSON, T. 2010. *Unpacking International Organisations: The dynamics of compound bureaucracies,* Manchester, Manchester University Press.

123. SCHIMMELFENNIG, F. 2003. *The EU, NATO and the Integration of Europe*, Cambridge University Press.; GHECIU, A. 2005. Security Institutions as Agents of Socialization? NATO and the 'New Europe'. *International Organization,* 59**,** 973-1012.

making.[124] Benjamin Zyla considers the strategic culture of NATO and the EU and concludes that the two organisations have a cultural overlap in representing 'values like freedom, liberty, human rights and the rule of law'.[125] He does not apply this to bureaucratic practices, but his work is useful in terms of outlining the strategic culture that guides these organisations' policy decision-making. He uses constructivist explanations for norms, values and beliefs influence on organisation behaviour.[126] Zyla asserts that elites 'hold the expertise' to aggregate norms and then 'process' and 'translate' them for society by means of publicly accessible language.

The Western 'community of values' calls for humanitarian border surveillance to monitor activity and aid safety measures for migrants as they make the dangerous journey to Europe.[127] Heller and Pezzani's *'Left to die Boat,'*[128] was a particularly influential report which represents this culture. It criticised the lack of collective responsibility towards vulnerable migrants. It described the plight of a boat of migrants, all of whom died after leaving Libya for Europe, and reported on the activities of

124. SCHIMMELFENNIG, F. 2003. *The EU, NATO and the Integration of Europe*, Cambridge University Press. p.192

125. ZYLA, B. 2015. Untying the Knot? Assessing the compatibility of the American and European strategic culture under President Obama. *Innovation: The European Journal of Social Science Research,* 28**,** 104-126.

126. Ibid. p.681

127. PUGH, M. 2001. Mediterranean Boat People: a case for co-operation? *Mediterranean Politics,* 6**,** 1-20.; PARLIAMENTARY ASSEMBLY 2013. The “left-to-die boat”: actions and reactions. *In:* COUNCIL OF EUROPE (ed.). Brussels: Council of Europe,.; HELLER, C., PEZZANI, L. & STUDIO, S. 2011. Left to Die Boat. *In:* FORENSIC ARCHITECTURE (ed.). London: Centre for Research Architecture, Goldsmiths College.; LAWRENCE, M. 2014. Helping Europe with its Sea. Small Wars Journal.; RIJPMA, J. J. 2010. Frontex: successful blame shifting of the Member States? *Elcano Newsletter***,** 6.;

128. HELLER, C., PEZZANI, L. & STUDIO, S. 2011. Left to Die Boat. *In:* FORENSIC ARCHITECTURE (ed.). London: Centre for Research Architecture, Goldsmiths College.

international security bodies who were monitoring the Mediterranean at the time. This included NATO, Frontex, and Maltese and Italian coastguards. It presented the information surrounding the deaths of the migrants, and affected subsequent policy making within the European Commission and NATO.[129] Nina Perkowski's *'Normative Assessment of the Aims and Practices of the European Border Agency, Frontex'*[130] considers the 'community of values' in this context. She traces the origins of the 'community of values' and shows evidence for these in the Lisbon treaty and Frontex founding regulation.[131] She considers the impact of this strategic culture in the creation of Frontex and notes the contradiction of the humanitarian culture with the heightened security tensions around migration and border surveillance. She also considers the concept of 'solidarity' that was invoked regarding joint operations of border control. Here, instead of the positive connotations of multilateralism and mutual support, solidarity is portrayed as a negative sentiment, where Western identity is invoked against vulnerable migrants. Perkowski considers evidence of the 'community of values' in relation to Frontex's operations, but does not analyse the influence of this upon Frontex's bureaucratic practices and procurement decision-making.

The 'civil military' culture, defined above, refers to security practices that straddle the security and defence sector. Two aspects are relevant to this theme and relate to procurement practices. First, that civil military solutions are more acceptable to

129. PARLIAMENTARY ASSEMBLY 2013. The “left-to-die boat”: actions and reactions. *In:* COUNCIL OF EUROPE (ed.). Brussels: Council of Europe,.

130. PERKOWSKI, N. 2012. A normative assessment of the aims and practices of the European border management agency Frontex. Oxford: Refugees Studies Centre.

131. Ibid.

European member states due to their soft security (rather than military) bias.[132] Second, the civil military culture is related to the US Revolution in Military Affairs (RMA). This generates a driver for solutions based on civil security functions of surveillance and information gathering. Mawdsley explores the concept of 'civil military' and her reports are a useful source of information on the civil military sector.[133] She refers to the Western preference for civil military or 'security' capabilities in its strategic culture.[134] Here, 'security is a more politically acceptable way of describing what was traditionally defence'.[135] She considers if the defence and security market have merged, in the context of expanding EU competency in the 'civil military' sphere. She notes that the EU frames its activities as 'security', deliberately blurring them with defence, in order to legitimately expand its role in the defence sector.[136] Her report on the EU Commission's policy activism contemplates the tensions between EU civil rights emphasis and perceived security requirements. Mawdsley asserts that a humanitarian agenda in European security policy means that non-military actors are involved in the input of a cultural agenda into policy.[137] Hoijtink's, '*Capitalising on Emergence: The new civil security marketing in Europe',*[138] relates military discourse concerning RMA and

132. KAGAN, R. 2003. Of Paradise and Power: America and Europe in the New World Order (New York: Alfred A. Knopf).; See page X later in the thesis.

133. MAWDSLEY, J. 2013b. A European Agenda for Security Technology: From Innovation Policy to Export Controls. *Flemish Peace Institute, Report.*; MAWDSLEY, J., BAILES, A. & DEPAUW, S. 2012. Towards a Merger of the European Defence and Security Markets. *Brussels: Flemish Peace Research Institute*.

134. MAWDSLEY, J. 2013b. A European Agenda for Security Technology: From Innovation Policy to Export Controls. *Flemish Peace Institute, Report.*

135. Ibid.

136. Ibid. p.16

137. Ibid. p.17

138. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.

network centric warfare to the European civil military security sector.[139] Hoijtink believes that the civil military industry evolution is linked with the EU defence demand and a strategic culture. He identifies evidence for this in the EU Research Seventh Framework Programme (FP7),[140] within which the EU invested €1.4bn for research and development of security technology. The thrust of the article is the emergence of a civil military market, and he explicitly refers to the contracts for EUROSUR border surveillance systems.[141]

Contribution to the Literature

The Literature Review considered academic works concerning collaborative procurement, the securitisation of border surveillance, organisation decision-making, multilateralism and the strategic cultures of Western 'community of values' and civil military surveillance. The thesis draws upon the literature referred to above to consider collaborative procurement decision-making. It addresses the findings and gaps and intends to make several contributions to the collaborative procurement literature.

First, the thesis acknowledges cultural influences in the generation of political support that is required for successful, collaborative security policy and the related procurement. Existing collaborative defence literature refers to the necessity of 'political will', but offers insufficient insights into cultural factors affecting security policy and procurement

139. Ibid.

140. https://ec.europa.eu/research/fp7/understanding/fp7inbrief/what-is_en.html Accessed September 2017

141. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475. p.469

behaviour. While some studies acknowledge cultural factors, this thesis specifically addresses this aspect in the context of multilateral surveillance security solutions.

Second, the thesis expands analysis of collaborative procurement by considering the effects of organisational bureaucracy on procurement activities. Existing literature omits to consider how multilateral bureaucratic structure, procurement practices and organisation culture may affect procurement outcomes. This thesis considers drivers for procurement as they filter through NATO and the EU bureaucracy. It encompasses ideas considered in the literature regarding organisations as policy entrepreneurs and 'honest brokers', but expands the analysis of behaviour using organisational theory. It analyses different strategic and cultural factors, including scrutiny and criticism that affect procurement decision-making.

Third, the thesis contributes to collaborative procurement literature by linking civil military procurement activities to traditional, collaborative defence procurement analysis. While the literature above acknowledges that civil military and defence industrial dynamics are different, there is not much analysis of the implications for procurement processes, nor any attempt to bridge the gap. Analysis of the drivers within the decision-making processes for civil military capabilities provides interesting and innovative insights into contemporary procurement activities.

Thesis Outline

The thesis is divided into five chapters. The first chapter describes the theory and methodology employed to explain the drivers for multilateral procurement of surveillance capabilities. Three theoretical approaches are used. First, rational drivers such as cost efficiency and the need for joint surveillance missions are identified. The thesis concludes that they are insufficient to fully explain and encourage successful multilateral procurement. Second, organisation theory and bureaucratic politics are considered as explanations for organisational interests, and for the delivery of other actor (member state and industrial actors) interests into the decision-making. Finally, sociological institutionalism provides explanations for cultural drivers for the procurement of surveillance, such as the Western 'community of values', civil military solutions, and multilateralism. Thus organisation theory is used to operationalise[142] calculus and cultural agendas.

The second chapter describes and analyses the macro context of member state requirements for transnational surveillance functionality and joint procurement. Here, divergence in member states' strategic outlook and calculus drivers, such as industrial imperatives, distract from efficient procurement activities. However, common cultural themes are shown to generate the essential political will to drive successful procurement policy and process. The third chapter considers the micro context of multilateral bureaucracies. This is important in that it analyses bureaucratic structure, procurement processes and organisation culture and identifies how the drivers for procurement are delivered.

142. Throughout the thesis 'operationalise' is taken to mean 'put into operation or use'

The thesis then considers two relevant case studies of multinational procurement of largely 'off-the-shelf' systems.[143] The first case study is NATO's procurement of its Alliance Ground Surveillance (AGS) capability, where fifteen member states are procuring five Global Hawk Unmanned Aerial Vehicles (UAVs). The second case study looks at two contracts by the EU Commission and Frontex. First, the policy and procurement for the Eurosur Communication Network, and second Frontex's procurement of Aerial Surveillance Services. The thesis outlines the findings and analysis regarding the case studies. In particular it considers the drivers behind three aspects: agreement to the surveillance missions that require the procurement; how political support was generated for the policy and procurement; drivers behind the specification of the final solution. Finally, the conclusion details the key findings of the research regarding the impact of cultural drivers on procurement practices in international organisations. It considers how the findings may be applied to future procurement and suggests further avenues of research.

143. NATO's AGS and Frontex Aerial Surveillance services are largely off-the-shelf. Eurosur Communication Network is a bespoke system, but of low technical specification.

Chapter 1: Theory and Methodology

Introduction

The theory and methods used to analyse security and defence procurement in this thesis need to encompass political motives and context, as well as issues of efficiency and process more closely associated with economics. This chapter introduces the theoretical framework and methodological approach employed to address the phenomenon under study: multilateral, collaborative procurement of a security capability, where the multilateral organisation is performing the function associated with the capability. Theory and method provide a structured approach to answer the research question: Is multilateral procurement of surveillance capability driven by calculus or culture? This question encompasses two parts, why 'multilateral' procurement and why 'surveillance'? The tool box of theoretical framework and methodological approach must be able to address these two facets of the research question. Once these parts have been considered, a third aspect of the question requires deeper exploration as to whether the motives for the procurement represent calculus or culture.

The research objective of this study is to discern the extent of cultural influences on policy and decisions for multilateral procurement of surveillance solutions. This thesis proposes that causal enquiry should refer to three overarching approaches: the influence of security strategy; societal, ideational influence; and the influence of organisation dynamics. These relate to three theoretical schools of thought, Strategic Choice, Institutionalism and Organisation Theory. The thesis demonstrates that the Strategic Choice theory provides insufficient explanations for the collaborative procurement, and

that the inclusion of Institutionalist approach provides helpful analysis of how cultural drivers encourage the joint acquisition. Organisation theory then helps to explain and operationalise the cultural agenda. The chapter first justifies the theoretical framework chosen to explain procurement decision-making in multilateral organisations. Then it provides a detailed overview of the major schools of thought referred to in the research. Finally, it makes the case for adopting a qualitative methodology to gather data regarding participants, organisations and ideational context of EU and NATO procurement. It describes how the methodology structures and aids analysis of this data to enable the research question to be answered.

Theoretical Framework

Multilateral procurement is a complex process and requires a theoretical framework that can accommodate all the significant aspects. 'Defining a need for new equipment is not a simple exercise to determine gaps in capability, even if it is portrayed in this way. A quest for best equipment is not the only possibility. There is often rivalry and conflict between decision-making actors around the question of what to procure.'[144] The theoretical framework has to accommodate behavioural analysis of all the significant actors involved in multilateral procurement; these include member state representatives, organisation staff and private sector professionals. It has to provide explanations for decisions taken at different stages in the process. For example those decisions regarding the surveillance requirement's validity; its priority for funding; the organisation procurement strategy; choice of supplier or contractor; contract format and terms; and

144. JOANA, J. & SMITH, A. 2006. Changing french military procurement policy: The state, industry and 'Europe' in the case of the A400M. *West European Politics,* 29**,** 70-89.

support arrangements. This necessitates an understanding of the procurement context and includes analysis of the environment at both micro and macro levels. Moreover the framework has to address the research question that makes the distinction between calculus (realist) drivers and cultural (constructivist) drivers. It includes of both schools of thought at different stages of the procurement decision-making chain. This section refers to precedents for this in other studies, and justifies the framework.

The thesis builds upon existing procurement studies via an adaption of the 'arms dynamic'. The 'arms dynamic' is understood as 'the sets of pressures that make actors.....both acquire armed forces and change the quantity and quality of the armed forces that they already possess'.[145] Although surveillance is a security capability and not strictly 'arms', it is treated as part of a defence and security strategy and which justifies this foundation. The thesis covers new ground in analysis of civil military *security* procurement rather than purely defence procurement, as referred to in the definitions section of the Introduction above. The theoretical framework builds upon the 'arms dynamic' framework to expand the reference point from state behaviour to multilateral organisations. It builds on Buzan's and other academic procurement models.[146] Buzan's models are 'action-reaction', 'domestic structure' and 'symbols'. Other academics also include 'realist', 'technological imperative', 'bureaucratic politics',

145. BUZAN, B. & HERRING, E. 1998. *The Arms Dynamic in World Politics*, Lynne Rienner Publishers.
146. Ibid.; SPEAR, J. & COOPER, N. 2010. The Defence Trade. *In:* COLLINS, A. (ed.) *Contemporary Security Studies.* Oxford: Oxford University Press.; LAKOFF, S. & BRUVOLD, W. E. 1990. Controlling the Qualitative Arms Race: The Primacy of Politics. *Science, Technology, & Human Values,* 15**,** 382-411.; FARRELL, T. 1997. *Weapons Without a Cause: The Politics of Weapons Acquisition in the United States*, St. Martin's Press.;

and 'economic' drivers.[147] The thesis adapts these models to describe five appropriate drivers for multilateral acquisition of a security capability: strategic rationale, technical imperative, industrial imperative, role expansion and symbolic drivers. These drivers offer explanations for two facets of the research question, the *multilateral* nature of the procurement, and the choice for a *surveillance capability* as a security solution. The theoretical framework is outlined and justified below, beginning with a description of the drivers.

Strategic rationale driver explains collaborative procurement of a security capability via a multilateral organisation as part of a rational calculation for cost efficiency. It also explains the choice of surveillance capability as a rational security strategy against a specific threat. The technical imperative driver is an adaption of the action-reaction model where a capability is strategically procured with reference to an external rivalry such as the US and the EU. The industrial imperative driver explains the involvement of interest groups, such as politicians and industrial professionals leading to irrational influences on the procurement process. Symbolic drivers relate the procurement to norms related to the Western 'community of values', civil military security solutions and

147. Buzan describes the 'action - reaction' model as related to security strategy, where the arms dynamic is driven by factors external to the state, or multilateral organisation as in the case of this thesis. The 'domestic structure' model considers the micro environment of factors within the multilateral organisation. It suggests a number of factors that can affect the arms dynamic, such as organisational politics, institutionalisation of research and development, and unifying and identity creating threats. Buzan includes the Symbols model in the most recent edition of his book. Here state and non state actors are either affected by or use and manipulate symbols to achieve policy goals, such as procurement activities, in the pursuit of security. Other academics such as Lakoff, Bruvold and Farrell include 'technical imperative' where either the pace of technology or the promise of technological innovation by scientists drives procurement. 'Bureaucratic politics' model is proposed by Lakoff and Bruvold where internal, non-state actors restrain state interests via their influence on policy.

ideas of identity and multilateralism. Finally, the role expansion driver explains procurement as evidence of organisations seeking to consolidate or expand their missions. These drivers may not be mutually exclusive, a combination of the explanations is usually in operation,[148] but the research brings a fresh approach by emphasising cultural, symbolic aspects that are operationalised during the bureaucratic procurement process.

Three mainstream schools of thought are used to consider the five drivers for procurement outlined above: strategic choice, sociological institutionalism and organisation theory. The different schools of thought address the *origins* of the motives, whether it is a rational argument, the influence of an ideational, macro environment or an organisation impetus. Strategic choice addresses strategic rationale, technical imperative and industrial imperative drivers; sociological institutionalism considers symbolic drivers related to strategic culture; and organisation theory addresses the role expansion driver:

Schools of Thought	**Surveillance Procurement Drivers**
Strategic Choice	Strategic rationale, technical imperative, industrial imperative
Soc. Institutionalism	Symbolic driver
Organisation Theory	Role expansion

Figure 1. Theoretical Framework

148. SPEAR, J. & COOPER, N. 2010. The Defence Trade. *In:* COLLINS, A. (ed.) *Contemporary Security Studies*. Oxford: Oxford University Press.

Strategic choice theory[149] addresses procurement from a rational (realist) aspect. Here member states consider the calculus, strategic rationale for multilateral procurement of a capability via their perception of security threats, cost benefit analysis, and technical and industrial imperatives. Strategic rationale will almost always be the overt justification for procurement but may not be sufficient to drive a complex, joint acquisition process to its conclusion. The research will acknowledge this rationale but considers additional motives within the procurement process that are critical to the completion of the acquisition.

Sociological institutionalism (SI) addresses environmental, cultural influences on organisation decision-making from a constructivist aspect. SI can explain the influence of ideas and symbols generated at the societal level, such as modernity (and the Western 'community of values'), security norms (related to civil military solutions), and multilateralism and identity. These ideas affect procurement processes, and the surveillance solution chosen, at different stages of the decision-making chain. SI is predominantly a cultural approach but the ideas and symbols may be used strategically. Therefore the element of calculus cannot be overlooked in this model of explanation.

Finally, organisation theory is used to look inside the black box of the organisations of NATO and the EU and address 'multi actor', self-interested, calculus decision-making. It explains organisation role expansion and survival drivers where NATO and the EU derive additional roles and benefit from the procurement. Organisation theory also operationalises the delivery of procurement drivers, and the calculus and cultural agendas.

149. Strategic Theory as used in this thesis is interchangeable with Rational Choice theory

This theoretical framework is a complex combination of approaches, but the subject matter of multilateral procurement contains many aspects that need to be examined. The final choice of framework was made after careful consideration and referral to other procurement and organisational studies that also combine multiple schools of thought.[150] Further, the framework supports the distinction between *calculus* and *cultural* drivers made in the research question. The dichotomy is justified as it reduces the complexity of the framework, by distilling and distinguishing the findings regarding calculus, self-interested incentives (related to realism and organisation theory) and cultural, ideational incentives (related to constructivism).

However, the thesis acknowledges the limitations of this framework. First, the distinction between calculus and culture is not often clear-cut. The combination of calculus (realist) and cultural (constructivist) explanations for the procurement is a limitation that social constructivists could take issue with, arguing that even the calculus drivers have cultural, ideational origins.[151] The inclusion of both calculus and culture reflects previous assertions that constructivism seizes the 'middle ground' and exists at

150. FARRELL, T. 1997. *Weapons Without a Cause: The Politics of Weapons Acquisition in the United States*, St. Martin's Press.; BUZAN, B. & HERRING, E. 1998. *The Arms Dynamic in World Politics*, Lynne Rienner Publishers.; SCOTT, R. W. 1992. Organizations: Rational, natural, and open systems. *Aufl., Englewood Cliffs (NJ)*.; REINALDA, B. & VERBEEK, B. 2004. *Decision Making Within International Organizations,* Abingdon, ROUTLEDGE ECPR STUDIES IN EUROPEAN POLITICAL SCIENCE.; MARCUSSEN, M., TRONDAL, J., VEGGELAND, F. & LARSSON, T. 2010. *Unpacking International Organisations: The dynamics of compound bureaucracies,* Manchester, Manchester University Press.

151. FINNEMORE, M. & SIKKINK, K. 2001. Taking stock: the constructivist research program in international relations and comparative politics. *Annual review of political science,* 4**,** 391-416.

the intersection of idealism and materialism.[152] Thus the thesis takes a pragmatic approach regarding the relationship between calculus and culture, it asserts that references to the ideas and norms can be goal oriented and this is supported by the literature.[153]

Second, social constructivism and institutionalism embrace a broad church of approaches.[154] Criticisms of this framework could generate from these different schools of thought within institutionalism. Various approaches include: systemic approaches that focus on state identity constituted by social interaction;[155] holistic constructivism that is concerned with the dynamics of international change;[156] the Copenhagen School which links constructivism to securitisation;[157] cultural-institutional explanations of security policy;[158] explanations of organisation internal dynamics through cultural references;[159] and international organisational behaviour, where organisations seek

152. ADLER, E. 1997. Seizing the Middle Ground:: Constructivism in World Politics. *European Journal of International Relations,* 3**,** 319-363.

153. CAPORASO, J. A. 1992. International relations theory and multilateralism: the search for foundations. *International Organization,* 46**,** 599-632.;

154. The Sociological Institutionalism section below examines this school of thought in greater detail.

155. WENDT, A. 1996. Identity and structural change in international politics. *In:* LAPID, Y. & KRATOCHWIL, F. (eds.) *The Return of Culture and Identity in IR Theory.* London: Lynne Rienner Publishers.

156. RUGGIE, J. G. 1993. *Multilateralism matters: The theory and praxis of an institutional form*, Columbia University Press.; PRICE, R. & REUS - SMIT, C. 1998. Dangerous Liaisons?: Critical International Theory and Constructivism. *European Journal of International Relations,* 4**,** 259-294.

157. BUZAN, B., WÆVER, O. & DE WILDE, J. 1998. *Security: a new framework for analysis*, Lynne Rienner Publishers.;

158. KATZENSTEIN, P. J. 1996. *The Culture of National Security: Norms and identity in World Politics*, Columbia University Press.

159. POWELL, W. W. & DIMAGGIO, P. J. 2012. *The New Institutionalism in Organizational Analysis*, University of Chicago Press.; WILSON, J. Q. 1989. *Bureaucracy: What government agencies do and why they do it*, Basic Books.

legitimacy and exercise limited autonomy.[160] This thesis limits its approach and refers to these last two social constructivist approaches that refer to organisations and how they reflect macro international security policy and micro bureaucratic influences. It therefore could be criticised by other social constructivists in that it does not offer explanations for the *origins* of the discourse and norms, the securitisation of migration, or of the nature of the border surveillance function being performed. Rather it looks to the causal effects of 'collective expectations'[161] and how these are realised in the bureaucratic, procurement decision-making chain. This takes place *within* the bureaucracies, and relates to the generation of capability for that security function. The thesis does not set aside social constructivism, but rather employs specific aspects of this school of thought to explain the collegiate dynamics in multinational procurement.

Finally, those writing about international organisations have adopted the complex approach.[162] Here, observations are made that international bureaucracies are multidimensional rather than uni-dimensional 'as suggested by realist and neo-liberalist theoretical orthodoxy'.[163] Here, 'they are not merely neutral tools used by member

160. BARNETT, M. N. & FINNEMORE, M. 1999. The politics, power, and pathologies of international organizations. *International organization,* 53**,** 699-732.

161. KATZENSTEIN, P. J. 1996. *The Culture of National Security: Norms and identity in World Politics*, Columbia University Press. p.7

162. MARCUSSEN, M., TRONDAL, J., VEGGELAND, F. & LARSSON, T. 2010. *Unpacking International Organisations: The dynamics of compound bureaucracies,* Manchester, Manchester University Press. p.12-13; REINALDA, B. & VERBEEK, B. 2004. *Decision Making Within International Organizations,* Abingdon, ROUTLEDGE ECPR STUDIES IN EUROPEAN POLITICAL SCIENCE. p.11

163. MARCUSSEN, M., TRONDAL, J., VEGGELAND, F. & LARSSON, T. 2010. *Unpacking International Organisations: The dynamics of compound bureaucracies,* Manchester, Manchester University Press. p.12-13;

governments to fulfil predetermined **[calculus]**[164] preferences; they are also Weberian rule-driven bureaucracies, epistemic communities of professional experts, and socialising institutions that transform nationally oriented officials into community-minded **[cultural]**[165] supranational officials'.[166] Thus the calculus and culture distinction acknowledges the multidimensional aspects of NATO and the EU bureaucracies.

In sum, the analysis of collaborative procurement requires multi faceted approach to capture all the aspects of the Western security and bureaucratic environment. The theoretical framework should achieve this by referencing three major schools of thought, strategic choice, sociological institutionalism and organisation theory. These in turn support explanations of the potential drivers for collaboration: strategic rationale, industrial and technical imperatives; symbolic drivers and organisation role expansion. The thesis proposes that distinction between calculus and culture is a useful tool to distil this complex combination. Further, it captures the multidimensional complexity of the organisations themselves. The next section describes the three major theoretical approaches in detail and notes their appropriateness for this study of the social processes of collaborative procurement.

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164. Author insert

165. Author insert

166. MARCUSSEN, M., TRONDAL, J., VEGGELAND, F. & LARSSON, T. 2010. *Unpacking International Organisations: The dynamics of compound bureaucracies,* Manchester, Manchester University Press. p.12-13; HAAS, P. M. 1992. Introduction: Epistemic Communities and International Policy Coordination. *International Organization,* 46**,** 1-35.; HAAS, E. B. & DINAN, D. 1958. *The uniting of Europe: Political, social, and economic forces, 1950-1957*, Stanford University Press Stanford.

Strategic Choice Theory

Strategic Choice (SC) is an approach that explains and predicts rational behaviour and can aid analysis of decision-making by strategic actors. Rational behaviour is defined as purposeful, goal directed behaviour exhibited when an actor 'uses the best information available and chooses from the possible responses likely to maximise his goals'.[167] It is a useful approach in this thesis as it covers self-interested incentives to procure surveillance and provides explanations for rational behaviour concerning the multilateral nature of the procurement, including industrial and technical imperatives. National Security Strategies are a useful source of evidence of strategic choice. Here states outline and justify their security strategy according to their 'rationally' perceived threats and may even propose solutions, though these are not usually specific.[168] For example France and the US both emphasise terrorism, trafficking, cross border crime and consequences of failed states as threats in their security strategies.[169] They emphasise the need for pre-emption and a strategy of 'knowledge and anticipation' that suggest that surveillance could be part of a rational solution to these threats.[170]

167. VERBA, S. 1961. Assumptions of rationality and non-rationality in models of the international system. *World Politics,* 14**,** 93-117.

168. This research looks at the evidence of National Security Strategies to rationally justify the procurement of surveillance in Chapter Two.

169. THE REPUBLIC OF FRANCE 2013. French White Paper, Defence and National Security.; THE WHITE HOUSE 2015. United States National Security Strategy. Washington.; JOINT CHIEFS OF STAFF 2015. The National Military Strategy of the United States of America. *In:* OFFICE OF THE SECRETARY OF DEFENSE (ed.). Washington.

170. THE REPUBLIC OF FRANCE 2013. French White Paper, Defence and National Security. p.103

Background of Strategic Choice

Strategic Choice explains decision-making that is guided by 'careful definition of situations, weighing of goals, consideration of all alternatives and the selection of options that are most likely to achieve the highest goals.'[171] It is related to economics in that it is concerned with the efficiency of solutions.[172] It is also related to the 'meta' theory of Realism that assumes that self-interest is primary and therefore actions can be predicted and explained easily.[173] The theory considers the international environment as an anarchic society of states, as described by Hedley Bull and Barry Buzan.[174] This environment has many dimensions that must be considered holistically before actors make decisions about how to deal with the future.[175] Strategic or rational actor theories are often used as 'base-case' explanations[176] against which other theories are tested.[177]

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171. KEGLEY, C. & BLANTON, S. 2012. *World Politics: Trend and Transformation, 2012-2013 Edition*, Cengage Learning.

172. STEIN, J. G. 2008. Foreign policy decision making: rational, psychological, and neurological models. *Foreign policy: theories, actors, cases*, 101-116.

173. KEGLEY, C. & BLANTON, S. 2012. *World Politics: Trend and Transformation, 2012-2013 Edition*, Cengage Learning.

174. BULL, H. 2012. *The Anarchical Society: A Study of Order in World Politics*, Palgrave Macmillan.; BUZAN, B. 2008. *People, States & Fear: An Agenda for International Security Studies in the Post-Cold War Era*, ECPR Press.

175. YARGER, H. R. 2006. *Strategic Theory for the 21st Century: The Little Book on Big Strategy*, Lulu. com. p.35

176. 'Base-Case' explanations use rational, calculus based theory that appeals to common sense and depicts an expected decision-making process and solution. Where deviations are found from this scenario other explanations are required via alternative theories.

177. Examples include: ALLISON, G. T. & ZELLIKOW, P. 1999. *The Essence of Decision: Explaining the Cuban Missile Crisis*, Pearson.; FARRELL, T. 1997. *Weapons Without a Cause: The Politics of Weapons Acquisition in the United States*, St. Martin's Press.; LAKOFF, S. & BRUVOLD, W. E. 1990. Controlling the Qualitative Arms Race: The Primacy of Politics. *Science, Technology, & Human Values,* 15, 382-411.

Strategic Choice proposes a set of assumptions that guide analysis of procurement decision-making for a strategic rationale.[178] The first assumption concerns the definition of strategy. Strategy has many definitions but this thesis considers it as the rational 'art or science of shaping means so as to promote ends in any field of conflict'.[179] In the context of this thesis, the 'means' to be shaped are the equipment and personnel performing the surveillance functions, this includes a combination of private sector personnel, military forces and organisation personnel. The 'field of conflict' is the security context, here border surveillance, and the 'ends' are the political objectives of member states.[180] These objectives flow from actors' interests and factors in the strategic environment. The second assumption is that the political actor, here the member state, is central, and analysis is concerned only with the choices available to this actor. Further assumptions are that, third, the wider strategic environment influences actors' interests, this includes information from the environment and inferences taken from the actions of others; fourth, the actor will behave rationally in pursuit of their aims after a careful cost-benefit calculation and after identifying and discarding various alternative solutions;[181] and fifth, that actors exist in a world where everyone is pursuing their own interests and objectives.[182]

178. SMITH, M. L. R. 2011a. *Strategic Theory: What it is.... and just as importantly, what it isn't* [Online]. E-International Relations. Available: http://www.e-ir.info/2011/04/28/strategic-theory-what-it-is…and-just-as-importantly-what-it-isn't/ [Accessed 9th November 2015 2015].

179. BULL, H. 1968. Strategic Studies and Its Critics. *World Politics,* 20**,** 593-605.

180. This is adapted from the military context in BUZAN, B. & HERRING, E. 1998. *The Arms Dynamic in World Politics*, Lynne Rienner Publishers. p.2

181. KEGLEY, C. & BLANTON, S. 2012. *World Politics: Trend and Transformation, 2012-2013 Edition*, Cengage Learning. p.58

182. YARGER, H. R. 2006. *Strategic Theory for the 21st Century: The Little Book on Big Strategy*, Lulu. com.

Strategic choice explains the procurement drivers of strategic rationale, industrial imperative and technical imperative. This proposes that the procurement of surveillance capability is simply the best response to a perceived threat, such as monitoring borders or battlegrounds, or in the best interests of the member state regarding industry support or technical skills.

Limits of Strategic Choice

While SC is useful for identifying strategic decisions, the use of actor self-interest as the single attribute for decision-making, and the onerous information gathering process does not often reflect reality.[183] Most decision-making only approximates rational choice and 'bounded' rationality is more common, where actor capacity for choosing the best option is constrained by human and organisational obstacles.[184] These obstacles include 'cognitive dissonance' where actors ignore information that does not contribute to a favoured solution. Another limit of the theory is that all actors are defined as unitary, there are no explanations for different goals or a differentiated decision-making structure.[185] This is especially limiting in a multilateral context. However, this thesis considers SC as appropriate for a base case strategy and essential to include, as strategic rationale will be the overt justification for any procurement. Further, whilst the limitations referred to above may be encountered in short term decision-making, time frames for procurement tend to be part of long term plans that encourage the inclusion

183. KEGLEY, C. & BLANTON, S. 2012. *World Politics: Trend and Transformation, 2012-2013 Edition*, Cengage Learning. p.58; STEIN, J. G. 2008. Foreign policy decision making: rational, psychological, and neurological models. *Foreign policy: theories, actors, cases*, 101-116.

184. KEGLEY, C. & BLANTON, S. 2012. *World Politics: Trend and Transformation, 2012-2013 Edition*, Cengage Learning. p.58

185. ALLISON, G. T. & ZELLIKOW, P. 1999. *The Essence of Decision: Explaining the Cuban Missile Crisis*, Pearson.

of rational elements. The centrality of state actors is not strictly relevant to this study that includes non-state actors. However this aspect is caught by the inclusion of organisation studies below.

The three drivers are now outlined below, Strategic Rationale, Technical imperative and Industrial imperative

Strategic Rationale Driver for procurement:

Strategic rationale relates to two aspects of the procurement, first the declared member state, security requirement for the surveillance equipment and capability,[186] and second the use of a multilateral organisation as the instrument to procure that capability. Here member states are the central actors and the rational objectives are regional security and efficient procurement. If the capability is acquired jointly for purely strategic or economic reasons then this fulfils a rational, strategic theory of procurement.

First, surveillance capability may demonstrate strategic purpose if it can demonstrate three characteristics: if it carries out a necessary mission (i.e. one has to assess if roles such as surveillance of the Mediterranean region are a strategic necessity); if the equipment or contract is capable of carrying out its mission; and if it is the most cost effective, efficient equipment or contract to carry out the mission.[187] If the equipment or contractor capability does not fulfil these requirements then it can be concluded that the equipment was bought for other non-rational reasons. This research here refers to

186. This theory is adapted from the strategic issues model in FARRELL, T. 1997. *Weapons Without a Cause: The Politics of Weapons Acquisition in the United States*, St. Martin's Press. p.8

187. Ibid. p.9

European national and regional security strategy documents that outline perceived threats and strategies employed to address these threats. It is assumed they are written with a 'rational' stance. The study also refers to literature and interviews with member state, industry and organisation representatives for evidence concerning the efficiency of surveillance solutions procured.

Second, strategic choice theory asserts that member states use multilateral organisations to enhance efficiency.[188] However, organisations may be used to further state interests as part of a state security strategy. As such strategic rationale drives the *multilateral* nature of the procurement. The research considers evidence of strategic, political rationale behind member state choice for multilateral procurement, which is separate from the economic motive. This relates to Farrell's international political purpose model.[189] Here the choice for procurement may reflect rational, political motives such as political allegiance within an alliance.

Technical Imperative:

The Technical Imperative driver for procurement is related to the concept of the 'arms race'[190] and 'action-reaction' models of procurement decisions.[191] It is derived from a perceived technical superiority of an adversary or rival. Politicians and organisation

188. ABBOTT, K. W. & SNIDAL, D. 1998. Why States Act through Formal International Organizations. *Journal of Conflict Resolution,* 42**,** 3-32. p.9

189. FARRELL, T. 1997. *Weapons Without a Cause: The Politics of Weapons Acquisition in the United States*, St. Martin's Press. p.8

190. The 'arms race' is an extreme version of the 'arms dynamic': BUZAN, B. & HERRING, E. 1998. *The Arms Dynamic in World Politics*, Lynne Rienner Publishers.; THEE, M. 1986. *Military technology, Military strategy and the Arms Race,* New York, St Martin's Press. p.73

191. FARRELL, T. 1997. *Weapons Without a Cause: The Politics of Weapons Acquisition in the United States*, St. Martin's Press.

actors with strategic concerns drive this imperative.[192] In the 1960's the US developed their intercontinental ballistic missiles with reference to reported technical advances by the USSR.[193] This was later proved to be a misperception, but it is an example of the technical imperative. In a contemporary Western context, factions on either side of the Atlantic have ambitions for technical expertise in the security and surveillance industry. US security and defence industrial policy has been linked to its Revolution in Military Affairs (RMA) doctrine.[194] The EU aspires to compete with the US for its technical capabilities and to support EU technical industry.[195] In previous eras, military technology would have spin off effects for civil technology. These days it is civil technology that provides 'spin-on's that can be used for defence and security purposes.[196] The presence of technical imperatives will be ascertained via the level of priority of technical specifications in the surveillance solutions.

192. SPEAR, J. & COOPER, N. 2010. The Defence Trade. *In:* COLLINS, A. (ed.) *Contemporary Security Studies.* Oxford: Oxford University Press.; LAKOFF, S. & BRUVOLD, W. E. 1990. Controlling the Qualitative Arms Race: The Primacy of Politics. *Science, Technology, & Human Values,* 15**,** 382-411.

193. ALLISON, G. T. & MORRIS, F. A. 1975. Armaments and Arms Control: Exploring the Determinants of Military Weapons. *Daedalus,* 104**,** 99-129.; GRAY, C. S. 1971. The Arms Race Phenomenon. *World Politics,* 24**,** 39-79.

194. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.

195. EDLER, J. & JAMES, A. D. 2012. Understanding the emergence of STI policies in the EU: The genesis of EU security research and the role of the EU commission as policy entrepreneur. Manchester Business School Working Paper.; MÖRTH, U. 2003. Framing an American Threat: the European Commission and the Technology Gap.

196. LAKOFF, S. & BRUVOLD, W. E. 1990. Controlling the Qualitative Arms Race: The Primacy of Politics. *Science, Technology, & Human Values,* 15**,** 382-411.

Industrial Imperative:

Multilateral organisations provide forums for those who are concerned to support member states' economic and technical bases.[197] Member state representatives may support surveillance procurement if the provision of the capability has economic benefits in their constituencies / countries. This is linked to the concept of a 'military-industrial-political-complex' that comprises (in this context): organisation staff, industry actors and member state representatives 'with an interest in defence spending in their constituencies [countries]'.[198] This driver offers the explanation of *juste retour*[199] as a driver for procurement. Collaborative defence procurement is well known for *juste retour*. Here participating member states make procurement decisions that benefit their country's industrial interests, rather than for security or cost efficiency reasons. Collaborative procurement often cannot conclude unless these industrial interests are fulfilled. For example, the US is the largest participant in NATO's AGS programme, and the prime contractor for the AGS project is US based Northrop Grumman.

Industrial actors are often present as advisors and in lobbying capacities with member states and in organisation forums. For example the EU's 'European Security Research and Advisory board' (ESRAB)[200] and Group of Personalities,[201] who advised the EU

197. MÖRTH, U. 2003. Framing an American Threat: the European Commission and the Technology Gap.

198. Adapted from the definition found in: HARTLEY, K. & SANDLER, T. 2007. *Handbook of Defense Economics, Vol. 2. Defence in a Globalised World* Elsevier. p.1155

199. Where financial participation in a procurement is rewarded with commensurate industrial contracts; HOEFFLER, C. 2012. European armament co-operation and the renewal of industrial policy motives. *Journal of European Public Policy,* 19**,** 435-451.

200. EU COMMISSION 2005. COMMISSION DECISION of 22 April 2005 establishing the European Security Research Advisory Board (2005/516/EC).

Commission on security technology research in 2004, included many industrial figures. Security industry actors are likely to advocate the procurement of surveillance capability where there is the possibility of a contract to be gained. The research considers whether the surveillance capability being acquired serves member states' core interests concerning provision of equipment or contracting. It also attempts to ascertain if any inefficient acquisition practices are evident due to non-state actor influence. The objectives in this driver are material in nature and may therefore be placed at the calculus end of a continuum.

Sociological Institutionalism

Institutionalism considers the influence of the environment on decision-making processes. Sociological Institutionalism (SI) provides explanations of socially constructed influences on organisational behaviour. Outcomes are explained through the cohesion and adherence of actors to societal, cultural expectations and as such, can explain collaboration. Causal effects are seen through behaviour and strategies of action that are persistently employed. Cultural components, such as symbolic references, that are used to construct strategies of action are evidence of causal effect. SI considers the social processes through which decisions are made with reference to an overarching idea, or 'institution'. Institutions are defined as 'social phenomena that can create stable

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201. The Group of Personalities was co-chaired by European Commissioners Busquin and Liikanen. The Group was composed of eight security industry Chairmen and Chief Executives, four serving Members of the European Parliament, four Heads of major Research Institutes, two high-level European Defence Ministry officials and two high-level political figures BUSQUIN, P. & ERKKI, L. 2004. Research for a Secure Europe, Report of the Group of Personalities in the field of Security Research. Luxembourg: Office for the Official Publications of the European Communities.

patterns of collective and individual behaviour'.[202] In this research, symbolic, cultural components from the macro environment may be absorbed by member states and multilateral organisations and then manifested in the procurement decisions made. The research identifies institutions relevant to surveillance capability, such as civil military cultures, modernity and the Western 'community of values', and multilateralism. It considers whether evidence of these ideas are present and influential in the procurement process.

In the SI approach, institutions, such as multilateralism, take on a rule like status in social thought and action, and provide moral or cognitive templates for interpretation and action.[203] Institutions are symbolic systems, individuals and organisations reproduce the symbolic systems with both instrumental and ritual content.[204] For example, the institution of modernity, linked to notions of technical prestige and progress, can be represented by sophisticated security equipment or capabilities, such as Eyre and Suchman's findings related to developing nations' acquisition of fighter planes.[205] The Western 'community of values' represents humane attitude towards those in need, including illegal migrants, which stimulates decisions for surveillance of EU

202. MÖRTH, U. 2005. *Organizing European cooperation: the case of armaments*, Rowman & Littlefield.

203. HALL, P. A. & TAYLOR, R. C. R. 1996. Political Science and the Three New Institutionalisms. *Political Studies,* 44**,** 936-957.; MARCH, J. G. & OLSEN, J. P. 1983. The New Institutionalism: Organizational Factors in Political Life. *American Political Science Review,* 78**,** 734-749.

204. FRIEDLAND, R. & ALFORD, R. R. 1991. Bringing society back in: Symbols, practices and institutional contradictions. *In:* DIMAGGIO, P. J. & POWELL, W. W. (eds.) *The New Institutionalism in Organisational Analysis.* Chicago: University of Chicago Press.

205. EYRE, D. P. & SUCHMAN, M. C. 1996. Status, norms, and the proliferation of conventional weapons: An institutional theory approach. *In:* KATZENSTEIN, P. J. (ed.) *The Culture of National Security: Norms and Identity in World Politics.*

borders for safety as much as security. Organisations reproduce these symbolic systems and diffuse the ideas. Thus symbolism can be a theory for multilateral procurement.

Background of SI

SI is related to the meta theory of Constructivism and shares similar premises: structuralism, socially constructed values, norm based interests and logics of appropriateness.[206] 'Logics of appropriateness' govern action in 'determining what the situation is, what role is being fulfilled, and what the obligations of that role in that situation are'.[207] Alternative courses of action are judged by conformity to institutional roles and symbolic systems rather than the cost benefit analysis. Constructivism holds that ideas are the most fundamental 'building blocks' of social phenomenon,[208] and the primary cause for behaviour. SI provides a social structure for these ideational building blocks. Its analysis *starts* from the social structure, social structure's rules and values *create* all the actors that are relevant in international politics, 'including states, firms, organisations and even individuals'.[209]

206. POWELL, W. W. & DIMAGGIO, P. J. 2012. *The New Institutionalism in Organizational Analysis*, University of Chicago Press.; SCHIMMELFENNIG, F. 2003. *The EU, NATO and the Integration of Europe*, Cambridge University Press.

207. MARCH, J. G. & OLSEN, J. P. 1998. The Institutional Dynamics of International Political Orders. *International Organization,* 52**,** 943-969.

208. RUGGIE, J. G. Ibid.What Makes the World Hang Together? Neo-Utilitarianism and the Social Constructivist Challenge. 855-885.

209. FINNEMORE, M. 1996b. Norms, culture, and world politics: insights from sociology's institutionalism. *International organization,* 50**,** 325-347.

The SI view of 'world polity' is grounded in the seminal works of Meyer, Boli and Thomas, and Bergesen.[210] These academics argue that the world is governed by cultural rules based on Western notions of rationality, articulating symbolic goals of progress, common values and justice. These notions have their roots in Christianity and the links drawn in Western culture between the moral and natural world.[211] The rules define the rational institutions by which the goals (of progress and modernity) such as bureaucracy and markets are achieved. SI contends that behaviour is bounded by a worldview and not fully strategic, it does not deny rational behaviour, but emphasises the extent to which the cultural environment is structured by collective schemata and rules.[212] Academics such as Finnemore, Eyre and Suchman further developed SI in the 1990's, examining subjects such as national interest and security from a nation state perspective.[213]

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210. MEYER, J. W., BOLI, J. & THOMAS, G. M. 1987. Ontology and Rationalization in the Western Cultural Account. *In:* THOMAS, G. M., MEYER, J. W., RAMIREZ, F. O. & BOLI, J. (eds.) *Institutional Structure Constituting State, Society and the Individual.* Newbury Park: Sage Publications.; MEYER, J. W. 1980. The World Polity and the Authority of the Nation-State. *In:* BERGESEN, A. (ed.) *Studies of the Modern World System.* New York: Academic Press.; BERGESEN, A. Ibid.From Utilitarianism to Globology: The Shift from the Individual to the World as a Whole as the Primordial Unit of Analysis.

211. MEYER, J. W., BOLI, J. & THOMAS, G. M. 1987. Ontology and Rationalization in the Western Cultural Account. *In:* THOMAS, G. M., MEYER, J. W., RAMIREZ, F. O. & BOLI, J. (eds.) *Institutional Structure Constituting State, Society and the Individual.* Newbury Park: Sage Publications.

212. HALL, P. A. & TAYLOR, R. C. R. 1996. Political Science and the Three New Institutionalisms. *Political Studies,* 44**,** 936-957.

213. FINNEMORE, M. 1996b. Norms, culture, and world politics: insights from sociology's institutionalism. *International organization,* 50**,** 325-347.; FINNEMORE, M. 1996a. *National Interests in International Society,* Ithaca, Cornell University.; EYRE, D. P. & SUCHMAN, M. C. 1996. Status, norms, and the proliferation of conventional weapons: An institutional theory approach. *In:* KATZENSTEIN, P. J. (ed.) *The Culture of National Security: Norms and Identity in World Politics.*

Powell and DiMaggio also articulated arguments examining bureaucratic forms and procedures as culturally specific practices.[214] This theory explains the persistence of practices via collective processes of interpretation and social legitimacy.[215] For example surveillance activity may be justified by culturally acceptable Western 'community of values', emphasising safety and humane concerns, or by its civil military functions. Other writers such as Scott, propose causal mechanisms by which the world polity is diffused via organisations.[216] His book *'Organisations, Rational Natural and Open Systems'* provides useful explanations for the bridge between ideational influences and organisations. 'Open' systems are where organisations are 'deeply embedded in, and constituted by, the environments in which they operate...' From this perspective, organisations are not structured to function efficiently or to accommodate interest networks, rather they are 'manifestations of powerful institutional rules which function as highly rationalised myths that are binding.'[217]

Later writers use institutional explanations of procurement decisions[218] but this literature concentrates on nation states as procurement actors and has not examined the procurement by multilateral organisations. Finally, the SI approach has also been used

214. POWELL, W. W. & DIMAGGIO, P. J. 2012. *The New Institutionalism in Organizational Analysis*, University of Chicago Press.

215. SUCHMAN, M. C. 1995. Managing Legitimacy: Strategic and Institutional Approaches. *The Academy of Management Review,* 20**,** 571-610.

216. SCOTT, R. W. 1992. Organizations: Rational, natural, and open systems. *Aufl., Englewood Cliffs (NJ)*.

217. FARRELL, T. 1996. Figuring out fighting organisations: The new organisational analysis in strategic studies. *Journal of Strategic Studies,* 19**,** 122-135. quoting MEYER, J. W. & ROWAN, B. 1977. Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology,* 83**,** 340-363.

218. JOANA, J. & SMITH, A. 2006. Changing french military procurement policy: The state, industry and 'Europe' in the case of the A400M. *West European Politics,* 29**,** 70-89.

in explanations of the dysfunction of multilateral organisations and the expansion of NATO and the EU in the early 21st century.[219] However, none of these studies address an international security culture that influences organisation security roles and internal processes. This research intends to fill these identified gaps.

Criticisms of SI

SI has been criticised for the concept of world polity and is also linked with general problems of norm and institutional approaches. First, SI collates elements of Western culture, such as the rational means of bureaucracy and markets leading to progress (wealth accumulation) and equality (justice).[220] The theory assumes that these ideas are compatible, however, there are tensions between the ideas of 'progress and justice' with ideas of 'redistribution' and there are often trade-offs made in the real world between these two policies.[221] Surveillance capability may represent progress to those concerned with security, but it may impinge on civil liberties. Further, markets and bureaucracies, the means to justice and progress, may be in tension where market arrangements do not lead to equality. Second, SI's vision of world polity envisages just one direction *towards* progress and modernity. Finnemore notes that cultural feedback is not explained in the unidirectional SI model.[222] However, this research is not examining institutional change, but rather looking for evidence and explanations of organisation

219. SCHIMMELFENNIG, F. 2003. *The EU, NATO and the Integration of Europe*, Cambridge University Press.; BARNETT, M. N. & FINNEMORE, M. 1999. The politics, power, and pathologies of international organizations. *International organization,* 53**,** 699-732.; GHECIU, A. 2005. Security Institutions as Agents of Socialization? NATO and the 'New Europe'. *International Organization,* 59**,** 973-1012.

220. FINNEMORE, M. 1996b. Norms, culture, and world politics: insights from sociology's institutionalism. *International organization,* 50**,** 325-347.

221. Ibid.

222. Ibid.

decision-making. Another major criticism of SI is that the approach lacks a single theory of agency, or has too many empirically questionable theories of agency.[223] This research's focus on state and non-state agents intends to address concerns over agency. It will also address concerns that SI 'seems bloodless' and too focused on the macro process, missing the extent of competing interests within organisations by the inclusion of BP in the analysis.[224] Institutionalism is used to consider the Symbolic theory for procurement.

Symbolic drivers:

Symbolic aspects such as multilateralism and political unity may influence the collaborative procurement of a surveillance capability.[225] However, surveillance capability itself is associated with many symbolic systems. The practice may represent delineation of identity;[226] it may represent a symbol of intent, reflecting a projection of power and acting as a deterrent;[227] and it can manifest the Western 'community of values' culture which prioritises humane actions and the safety of those it monitors. The assets may also be associated with prestige symbols (where an organisation or nation

223. SCHIMMELFENNIG, F. 2000. International Socialization in the New Europe:: Rational Action in an Institutional Environment. *European Journal of International Relations,* 6**,** 109-139.

224. HALL, P. A. & TAYLOR, R. C. R. 1996. Political Science and the Three New Institutionalisms. *Political Studies,* 44**,** 936-957.

225. JOANA, J. & SMITH, A. 2006. Changing french military procurement policy: The state, industry and 'Europe' in the case of the A400M. *West European Politics,* 29**,** 70-89.; NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School.

226. BIGO, D. & GUILD, E. 2005. *Controlling Frontiers, Free Movement Into and Within Europe,* Aldershot, Ashgate Publishing.

227. TYLER, A. 2015. Tomorrow's Battles: Thinking about effect. *Jane's Defence Weekly*.

aspires to have a sophisticated security capability).[228] Finally, the procurement of surveillance solutions can represent the Western civil military security culture.[229] These symbolic systems are shared by EU and NATO organisations where they have similar Western member states that serve similar societal constituencies.

First, multilateral collaboration in procuring equipment or capability may be linked to political aims. Here the procurement becomes a symbol of solidarity within an organisation. Joana and Smith demonstrated that the requirement for A400M transporter was the object of evaluations and interpretations that went beyond technical merits or weaknesses of options.[230] The initial definition of the A400m project encompassed both stated and unstated multilateral aims of European cooperation i.e. political aims. This thesis assesses the importance of the political symbolism in the procurement process.

Surveillance capability may act as a symbol of the Western identity of 'we', with those being monitored as 'they'.[231] This relates to Post Modern ideas that threats are not objective, and foreign policy is all about manufacturing an 'other' against which an imaginary political identity can be forged. Thus by acquiring a surveillance capability:

228. This builds on ideas found in EYRE, D. P. & SUCHMAN, M. C. 1996. Status, norms, and the proliferation of conventional weapons: An institutional theory approach. *In:* KATZENSTEIN, P. J. (ed.) *The Culture of National Security: Norms and Identity in World Politics.*

229. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.

230. JOANA, J. & SMITH, A. 2006. Changing french military procurement policy: The state, industry and 'Europe' in the case of the A400M. *West European Politics,* 29**,** 70-89.

231. BIGO, D. & GUILD, E. 2005. *Controlling Frontiers, Free Movement Into and Within Europe,* Aldershot, Ashgate Publishing.

'borders, identities and difference are inscribed'.[232] This symbolic system may be linked to ideas that surveillance serves as a symbol of intent and power over those being monitored. For example representatives of Northrop Grumman recently argued that surveillance has the effect of a deterrent against security threats of cross border crime or human trafficking.[233] This attitude has been picked up and criticised in the literature above. A contrasting symbolic interpretation is that the surveillance represents the Western 'community of values' strategic culture, where there is a concern for the safety of those crossing transnational borders via dangerous illegal routes.

Surveillance assets and capability can be symbolic of prestige and status especially where it is associated with RMA and the latest technology such as unmanned drones and satellite pictures.[234] Building on this explanation, SI can explain that surveillance capability is acquired, not because of a match between technical functions and security needs, but because of the prestigious symbolic nature of the equipment or capability.[235] Finally, surveillance capability may be prioritised as a security solution because of civil military, 'soft' security preferences of European member states. These ideas are developed further in the thesis.

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232. SPEAR, J. & COOPER, N. 2010. The Defence Trade. *In:* COLLINS, A. (ed.) *Contemporary Security Studies*. Oxford: Oxford University Press. p.398

233. TYLER, A. 2015. Tomorrow's Battles: Thinking about effect. *Jane's Defence Weekly*.

234. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.

235. EYRE, D. P. & SUCHMAN, M. C. 1996. Status, norms, and the proliferation of conventional weapons: An institutional theory approach. *In:* KATZENSTEIN, P. J. (ed.) *The Culture of National Security: Norms and Identity in World Politics.*

Organisation Theory

Organisation theory covers a variety of methodologies used to consider organisational practices at the micro level. This thesis considers organisation theory from three aspects to explain the delivery of drivers for procurement through self interested decision-making dynamics, organisation culture and also organisation role expansion.

Bureaucratic Politics (BP) is a well-known and frequently invoked set of explanations for decision-making dynamics in organisations. BP provides accounts of pluralistic environments and explains compromised outcomes through conflicting actor preferences and the 'pulling and hauling' processes of bureaucratic decision-making. Here bureaucracies of multilateral organisations are envisaged not as a single entity, but as a forum of competing factions each trying to attain the best material outcome for themselves. The theory proposes that organisation decisions for surveillance solutions do not reflect a single set of consistent calculations about international security interests. A useful description of BP refers to government bureaucracies (in this thesis multilateral organisations) as:

> 'congeries of organisations with their own traditions and routines which affect policy and implementation. Decisions emerge not from reflection, but from argument and conflict within and between organisations, partly over who shall do what (organisational survival), and partly because of different perceptions of the problems and the means to deal with them. Any particular decision will be taken not so much on the merits of the case but as the result of

conflicting views and interests of a variety of organisations on this and many other questions as well.'[236]

Multilateral organisation procurement decision-making offers opportunity for involvement and actions of subordinate actors such as organisation and industry staff. These actors have different stakes and objectives in procurement processes.[237] Organisation personnel may want a greater role, industry actors may want a larger contract, and member state representatives may want access to technical knowledge. Decisions taken may therefore reflect compromise away from rational member state objectives so that coherence is achieved, or 'to hedge against dire predictions of participants'.[238] For example, the technical imperatives encourage procurement as a strategic response with reference to an external rivalry, such as that generated by the disparity in EU / US surveillance ability. Industrial imperative encourage procurement to satisfy member state economic benefits.

BP, as a subset of Organisation Theory explains the material interest and 'calculus' approach of actors, however broader organisation theories can also provide explanation for cultural influence at the micro level.[239] Academics such as Halperin, March and

236. CORNFORD, J. P. 1974. The Illusion of Decision. *British Journal of Political Science,* 4**,** 231-243.

237. AUSTIN SMITH, R. 1973. TFX: The $7-billion Contract That Changed the Rules. *In:* HALPERIN, M. H. & KANTER, A. (eds.) *Readings in American Foreign Policy: A bureaucratic perspective.* Boston: Little Brown & Co.

238. ALLISON, G. T. & HALPERIN, M. H. 1972. Bureaucratic Politics: A Paradigm and Some Policy Implications. *World Politics,* 24**,** 40-79.

239. HALPERIN, M. H. 1974. Bureaucratic Politics and Foreign Policy (Washington, DC: The Brookings Institution, 1974). Washington DC: The Brookings Institution.; KIER, E. 1999. *Imagining war: French and British military doctrine between the wars*, Princeton University Press Princeton.; WILSON, J. Q. 1989. *Bureaucracy: What government agencies do and why they do it*, Basic Books.

Olsen, Scott, and Wilson use Organisation Theory to explain organisational culture.[240] Halperin calls it the 'essence' of an organisation and refers to organisational roles and mission definition in terms of the 'essence' and culture rather than material interest. Organisational culture may affect procurement processes where a specific solution is adopted due to adherence to a culture, such as the civil military culture, that originates from staff expectations or organisational structures. Here 'logics of appropriateness' may constrain bureaucratic behaviour with reference to routines and standard operating procedures (SOPs) related to organisational culture.[241]

Bureaucratic Politics (BP)

In the 1970's Graham Allison articulated BP to explain and analyse US foreign policy decision-making in the Cuban Missile Crisis. Allison's *'The Essence of Decision, Explaining the Cuban Missile Crisis'* proposed that national, bureaucratic decision-making processes were not unified and strategic but fractured where actors had diverging views and material agendas.[242] Further, the model contended that organisational aspects of bureaucracies empowered (or constrained) actors through the control of (or lack of access to) knowledge and alternative options for action. There are three main propositions to the theory: First, actors' preferences are affected by their

240. HALPERIN, M. H. & CLAPP, P. A. 2006. *Bureaucratic Politics and Foreign Policy,* Washington D.C., Brookings Institution Press.; WILSON, J. Q. 1989. *Bureaucracy: What government agencies do and why they do it*, Basic Books.; SCOTT, R. W. 1992. Organizations: Rational, natural, and open systems. *Aufl., Englewood Cliffs (NJ)*.;

241. MARCH, J. G. & OLSEN, J. P. 1998. The Institutional Dynamics of International Political Orders. *International Organization,* 52**,** 943-969.; KRATOCHWIL, F. V. 1991. *Rules, norms, and decisions: on the conditions of practical and legal reasoning in international relations and domestic affairs*, Cambridge University Press.

242. ALLISON, G. T. 1971. *Essence of Decision: Explaining the Cuban Missile Crisis, Little, Brown, Boston, 1971,* Boston, Little Brown.

roles, i.e. by the interests of their organisations or departments; Second, that decisions are made via a process of pulling and hauling this may divert actors away from strategic objectives towards a dominating faction within the organisation or towards a compromise that appeases all collaborating factions.; Third, that compromised solutions are found ('resultants').[243]

BP has also been used for explanations of procurement of equipment and security contractors[244] although rarely in a multilateral context. The BP framework is appropriate for considering multilateral procurement where actors are making decisions in a bureaucracy according to diverging agendas. This may be where member states are acting according to interests of technical aspirations and industrial interests, or where the organisational bureaucracy is acting according to role expansion interests. Although few recent authors have related BP to multilateral organisations, Allison asserts that 'applied to relations between nations, the bureaucratic politics model directs attention to intra-national games, the overlap of which constitutes international relations'.[245] However this line of thought is not developed to consider BP at an international level or within an organisation in Allison's work.

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243. ALLISON, G. T. & HALPERIN, M. H. 1972. Bureaucratic Politics: A Paradigm and Some Policy Implications. *World Politics,* 24**,** 40-79.; ALLISON, G. T. 1971. *Essence of Decision: Explaining the Cuban Missile Crisis, Little, Brown, Boston, 1971,* Boston, Little Brown.

244. ALLISON, G. T. & MORRIS, F. A. 1975. Armaments and Arms Control: Exploring the Determinants of Military Weapons. *Daedalus,* 104**,** 99-129.; AUSTIN SMITH, R. 1973. TFX: The $7-billion Contract That Changed the Rules. *In:* HALPERIN, M. H. & KANTER, A. (eds.) *Readings in American Foreign Policy: A bureaucratic perspective.* Boston: Little Brown & Co.; CUSUMANO, E. & KINSEY, C. 2014. Bureaucratic Interests and the Outsourcing of Security: The Privatization of Diplomatic Protection in the United States and the United Kingdom. *Armed Forces & Society*.

245. ALLISON, G. T. 1971. *Essence of Decision: Explaining the Cuban Missile Crisis, Little, Brown, Boston, 1971,* Boston, Little Brown. p.149

This research will consider the roles played by, and the influence of, three different constituencies within the organisation: member states, organisation staff and industry personnel. BP can be applied to intergovernmental behaviour where the assumption holds that certain organisations can be treated as single actors. Organisations are counted as single actors when: first, those organisations have expressed a single preference and values (seen from official papers issued by that organisation); second, aligned goals mean that actions of the head, or representative, of that organisation can be treated as actions of that organisation; and third, the behaviour of organisation members is part of a single strategy.[246]

Criticisms of Bureaucratic Politics

There has been considerable criticism of BP and these criticisms need to be addressed where they are relevant to this thesis. An initial criticism is that BP is too oriented towards the US.[247] However there are studies that have used BP in other contexts such as the UK.[248] The original proponents of BP intended that the model be applied to governmental actions in most industrial nations.[249] As a general criticism, Welch faults

246. ALLISON, G. T. & HALPERIN, M. H. 1972. Bureaucratic Politics: A Paradigm and Some Policy Implications. *World Politics,* 24**,** 40-79.

247. SMITH, S. 1984. Policy Preferences and Bureaucratic Position: The Case of the American Hostage Rescue Mission. *International Affairs (Royal Institute of International Affairs 1944-),* 61**,** 9-25.

248. DUNLEAVY, P. 1990. REINTERPRETING THE WESTLAND AFFAIR: THEORIES OF THE STATE AND CORE EXECUTIVE DECISION MAKING. *Public Administration,* 68**,** 29-60.; CUSUMANO, E. & KINSEY, C. 2014. Bureaucratic Interests and the Outsourcing of Security: The Privatization of Diplomatic Protection in the United States and the United Kingdom. *Armed Forces & Society*.

249. ALLISON, G. T. & HALPERIN, M. H. 1972. Bureaucratic Politics: A Paradigm and Some Policy Implications. *World Politics,* 24**,** 40-79.

the paradigm for being event centric and for providing too many explanations for bureaucratic influence over decisions, meaning that they cannot be generalised. He provides a menu of assumptions and concepts from past studies and suggests that these need refining and clarifying to produce a coherent model that can be used for a positivist study.[250] Likewise, other studies criticise the surfeit of information provided by the theory that can complicate rather than simplify explanations of decisions.[251] This thesis focuses on the activity of procurement that has multiple inputs for decision-making. It therefore is suited to BP as an approach that can accommodate analysis of these multiple inputs. However, the analysis will acknowledge certain limitation of the conclusions drawn, due to the many variables being assessed. Further it focuses on three explanations of technical and industrial imperatives and role expansion, which limits the scope of reasoning.

BP has also been criticised for lack of casual mechanism between role and preference.[252] Bureaucratic role may certainly impact preference, but personal belief and world views are independent of 'bureaucratic role' influences. BP is criticised for having too many variables to explain actor preference[253] thereby losing any parsimony of theory and

250. STERN, E., VERBEEK, B., WELCH, D. A., WELDES, J., KAARBO, J., GRUENFELD, D., HART, P. T. & ROSENTHAL, U. 1998. Whither the Study of Governmental Politics in Foreign Policymaking? *Mershon International Studies Review,* 42**,** 205-255.

251. RIPLEY, B. 1995. Cognition, Culture and Bureaucratic Politics. *In:* NEACK, L., HEY, J. A. & HANEY, P. J. (eds.) *Foreign policy analysis: continuity and change in its second generation.*

252. SMITH, S. 1984. Policy Preferences and Bureaucratic Position: The Case of the American Hostage Rescue Mission. *International Affairs (Royal Institute of International Affairs 1944-),* 61**,** 9-25.

253. BERNSTEIN, B. J. 2000. Understanding Decisionmaking, U.S. Foreign Policy, and the Cuban Missile Crisis: A Review Essay. *International Security,* 25**,** 134-164.; BENDOR, J. & HAMMOND, T. H. 1992. Rethinking Allison's Models. *The American Political Science Review,* 86**,** 301-322.; WELCH, D. A.

diluting the explanatory powers of the theory. This thesis agrees with Lakoff and Bruvold who contend that BP is a 'realist' approach to understanding bureaucratic structure, where bureaucracy is 'conceived as a pluralistic enterprise resembling the quasi-anarchical structure that prevails in international relations'.[254] This neatly includes a rational preference that is taken as a basic stance, and addresses in some part the problem of actors 'standing where they sit'. It makes the assumption that actors represent the rational interests of their organisations and their careers in that organisation. A final criticism of BP is that the aggregation of actor preferences into decisions, the process of 'pulling and hauling' cannot predict any outcome.[255] Whilst this may be true, this thesis considers 'pulling and hauling' an apt description of bargaining processes that explains *how* the procurement decisions are driven, and is a behavioural indicator that BP is present.

BP explains the decision-making dynamics of actors that include member state representatives, organisation staff and industry personnel. Organisation staff may advance the procurement driven by role expansion motives. This driver is described below.

1992. The Organizational Process and Bureaucratic Politics Paradigms: Retrospect and Prospect. *International Security,* 17**,** 112-146.

254. LAKOFF, S. & BRUVOLD, W. E. 1990. Controlling the Qualitative Arms Race: The Primacy of Politics. *Science, Technology, & Human Values,* 15**,** 382-411.

255. MILNER, H. V. 1998. Rationalizing Politics: The Emerging Synthesis of International, American, and Comparative Politics. *International Organization,* 52**,** 759-786.

Role Expansion Driver:

The Role expansion driver considers the internal pressures on organisations to innovate and consolidate security mandates via the acquisition of a capability. The central actors in this theory are organisation staff whose objectives are organisational role expansion. NATO and EU secretariats may state the need for surveillance capability as a method of role expansion and existential justifications for their respective organisations / agencies. Since the end of the Cold War, NATO has adapted its role to fit the changing security concerns of its transatlantic constituency.[256] The EU is also expanding its security role and developing capabilities to secure its borders via Frontex.[257] The thesis seeks to ascertain if there is evidence of the influence of organisation staff behaviour that supports the theory of Role Expansion. It considers if the procurement contracts demonstrate expansion or consolidation of security functions provided by the organisation and who were the decision makers behind the contracts. This driver can represent organisation calculus, where organisational survival may depend upon expansion of role.

256. TERRIFF, T. 2002. US Ideas and Military Change in NATO, 1989-1994. *In:* FARRELL, T. & TERRIFF, T. (eds.) *The sources of military change: Culture, politics, technology.* Boulder, Colorado: Lynne Rienner Publishers.; NEUMANN, I. 2007. From Alliance to Security Community: NATO. *In:* WILLIAMS, M. (ed.) *Culture and Security, Symbolic power and the politics of international security.* Abingdon: Routledge.

257. HAYES, B. & VERMEULEN, M. 2012. *Borderline: The EU's New Border Surveillance Initiatives: Assessing the Costs and Fundamental Rights Implications of EUROSUR and the" Smart Borders" Proposals: a Study by the Heinrich Böll Foundation*, Heinrich-Böll-Stiftung.; EDLER, J. & JAMES, A. D. 2012. Understanding the emergence of STI policies in the EU: The genesis of EU security research and the role of the EU commission as policy entrepreneur. Manchester Business School Working Paper.

Methodology

The study collected and analysed data for the primary research objective of discerning cultural and organisation factors that generated political support for collaborative procurement of a surveillance capability. Thus to better explain decision-making in multilateral procurement. This section outlines the methodology for gathering data within the case studies, for evaluating the findings, and concludes with a brief consideration of the case selection. Data collection focuses on three main areas. First, the participants of the procurement process; the preferences of those participants, and evidence of which participants' preferences dominate. Second, the nature of the organisation: how the procurement processes and goals and procedures of the organisation affect the surveillance solutions considered. Third, data is gathered that relates to the ideational context of the procurement and identifies where these ideas are reflected in the organisation and the preferences of participants.

There are few case studies to choose regarding multilateral procurement of a security capability where the organisation is involved in the security role. The study has selected two relevant case studies. The small 'n' case study means that the methodology used for the research is qualitative, as there is simply not enough data for a large 'n' quantitative analysis. Process tracing has been chosen as the appropriate qualitative method to be employed within the case studies. Here evidence is gathered via primary and secondary literature as well as interviews. For the evaluation of the findings the four tests of

causation suggested in Andrew Bennett's '*Process Tracing and Causal Inference'* are used.[258]

Process Tracing

Process Tracing is a method whereby 'the researcher examines histories, archival documents, interview transcripts and other sources to see whether the causal process a theory hypothesises or implies in a case is in fact evident in the sequence and values of the intervening variables in that case'.[259] This qualitative methodology was appropriate to reconstruct the multilateral procurement of surveillance capability in the EU and NATO bureaucracies and is carried out in two stages. The first stage was data collection from primary and secondary literature. Approximately 200 secondary articles and books are referred to in this research, the most important of which were referred in the Literature Review. Primary sources include member state security strategies, organisation work plans, policy papers, procurement plans and documents such as tender dossiers that directly relate to the procurement contracts. Secondary sources include literature and academic studies concerning NATO, the EU security roles, collaborative procurement and Western security cultures.

At the second stage, semi-structured, in-depth interviews were conducted with actors in the EU and NATO procurement processes and experts in the procurement and surveillance fields. The data gathered at stage one informed stage two and enabled a constructive process of tracing the drivers for the procurement. Interviews were

258. BENNETT, A. 2010. Process tracing and causal inference. *In:* BRADY, H. & COLLIER, D. (eds.) *Rethinking Social Inquiry*. Rowman and Littlefield.

259. GEORGE, A. L. & BENNETT, A. 2005. *Case Studies and theory development in the social sciences,* Cambridge, Massachusetts, MIT Press. p.6

conducted for three purposes in process tracing: First, to gain additional information about the drivers for multilateral surveillance procurement; second, to assess the thinking of decision makers and to look for evidence of ideational influences in their discourse; and third, to corroborate and triangulate data gathered from primary and secondary literature.

The process tracing method attempts to identify the sequential, causal chain and causal mechanism between the dependent variable, here the choice for multilateral procurement of surveillance capability, and the independent variables,[260] which are the five drivers for procurement outlined in the Theoretical Framework above (Strategic Rationale, Technical Imperative, Industrial Imperative, Role Expansion and Symbolic drivers). The process tracing will identify the balance and *nature* of the drivers behind procurement decisions at specific stages in the acquisition, as such indicating if the drivers represent calculus or culture. For example there is often a calculus, strategic rationale behind the initial policy for acquisition of security equipment, but symbolic drivers (such as the Western 'community of values') may be necessary to actually gain the political will to conclude the process and make the final decisions.

Interviews

Semi-structured, in-depth interviews have been carried out with participants in the procurement case studies. The interviews lasted around one hour, and were recorded, where possible, with the consent of the interviewee. Actors were selected for interviews via 'non probability', purposive sampling where they fulfil criteria relating to position,

260. Ibid. p.206

reputation and significance in the procurement process.[261] This is integral to process tracing which aims to reconstruct events; here the inclusion of specific, relevant and important actors in the process is essential. The disadvantage of the purposive sampling is that there is a danger of selection bias. The widest selection of interviewees possible are employed to address this possibility. Some chain referral or snowball sampling followed from the initial purposive sampling, which further widens the net to ensure a broad sample of actors. Selection bias in the study was further restrained by primary and secondary literature analysis, which helped to identify any subjectivity of the interviewee.

The study included approximately 40 interviews, and a list of interviewees is contained in the Annexes. These included both the elite personnel, high-level military and political diplomats, such as Lord Robertson, former NATO Secretary General and Robert Bell. Interviewees were selected from NATO, from the NATO's Conference of National Armaments Directors (CNAD) as well as the NATO Alliance Ground Surveillance Management Agency (NAGMSA) team, such as Jim Edge (current General Manager). From the EU, officers from the Directorate General Migration and Home Affairs were approached and also from the Frontex agency, in particular the Finance and Procurement team, the ICT team and the Research and Development Unit. Finally, industry personnel from Northrop Grumman and the subcontractors from the NATO AGS contract, and personnel from GMV and other Eurosur contractors were also interviewed.

261. TANSEY, O. 2007. Process tracing and elite interviewing: a case for non-probability sampling. *PS: Political Science & Politics,* 40**,** 765-772.

The interviewees selected provided data regarding the different stages in the procurement decision-making chain. Thus the high level diplomats and elite interviews gave insight into the political process behind the policy making for the procurement. Interviews with functional bureaucrats within NATO and the EU enabled data collection regarding the decision-making within the procurement implementation. The intention of the interviews was to elicit evidence that corroborated and enhanced information from other primary sources, and that identified the presence and influence of the different drivers for the procurement (as described in the theoretical framework above).

Some problems were encountered in interview data gathered due to the political nature of procurement. There were sensitivities about member state debates during the procurement process, for example those that concerned aspects of financing and specification of the capability. This led to wariness regarding the level of information that could be disclosed, and meant that in some interviews, expectations for the data required were not always met. First, interviewees were concerned regarding explicit references to debates between particular member state officials and/or organisation staff and often would not speak on the record. This limited some evidence, and inhibited nuanced analysis of the dynamics behind the decisions. In these instances the study tried to supplement with evidence from other primary sources, such as Wikileaks cables, press releases and policy documents. Second, there was sensitivity as to the commercial information regarding the contracts. The study gained what public information was available, but details of specific profit levels or commercial arrangements within the surveillance capability contracts were not disclosed. This limited analysis of the procurement outcomes to the publicly available information, and anecdotal observations (such as the sacrifice of profit margins by industry partners). However the thesis could

make some useful conclusions from the available information, noted where anecdotal evidence was the only source, and tried to get corroborating multiple anecdotal evidence where this was the case.

In general the expectations of data generation from the interviews were met and in some cases exceeded. Some of the more useful interviewees consented to second interviews where more information was sought after the initial data processing.

Data Processing and Analysis

Once data and evidence regarding the procurement processes is gathered via the methodologies outlined above, it is analysed and processed. The procurement decisions are reconstructed and data is coded with reference to the theoretical framework (which generated explanations for the drivers of strategic rationale, industrial and technical imperatives, role expansion and symbolism). Tests for causation are then conducted to assess the presence or absence and nature (cultural or calculus) of the five drivers at significant decision-making stages of the procurement. The four tests for causation outlined in Andrew Bennett's *Process Tracing and Causal Inference*[262] are used. These are first, 'straw in the wind' where evidence may be relevant for the procurement theory but not sufficient to prove it, no evidence is not sufficient to fail the theory; second, the 'hoop' test where evidence demonstrates that the procurement theory is necessary but not sufficient for successful procurement; third, the 'smoking gun' where evidence suggests that the procurement theory is not necessary but sufficient for successful procurement; and finally fourth the 'doubly decisive' test where evidence confirms the theory for

262. BENNETT, A. 2010. Process tracing and causal inference. *In:* BRADY, H. & COLLIER, D. (eds.) *Rethinking Social Inquiry*. Rowman and Littlefield.

procurement and lack of it eliminates the theory. From these tests of the evidence in the reconstruction it is possible to conclude whether explanations via one of the five drivers is dominant. Conclusions are then drawn as to which combination of drivers is able to explain the procurement outcomes and as to whether they represent culture or calculus.

Case Study Selection

The research addresses two case studies that are relevant and valid to answer the research question: is multilateral procurement of surveillance capability driven by culture or calculus? The underlying research interest is in cultural and organisation influences on collaborative procurement and these case studies seemed to provide excellent material for the discourse analysis. Surveillance is a capability that is particularly emphasised in the current security context, thus it is easy to find data on the cultural discourse on the various requirements for collaborative procurement.

Both the EU and NATO are in the process of acquiring surveillance capability, NATO's AGS system is to be used across its operations and the EU's agency Frontex is acquiring surveillance equipment and capability to monitor the EU borders. These case studies are examples of collaborative, multinational procurement of surveillance capability that has already been developed. Furthermore, they both represent procurement for a surveillance capability that could potentially fulfil similar civil military requirements (although the technical specification of the NATO AGS Programme fits high grade military requirements and is far more sophisticated than the EU surveillance capability).

Other aspects of the chosen case studies made them appealing. First, the case studies contain similar elements of member state, organisation and industry calculus and culture

that generate data for analysis. Although the procurement processes in the case studies are considerably different regarding scale and format, there are enough commonalities in the political, security and organisation context to justify their consideration in the same research project. Second, public speeches, policy statements, diplomatic cables and secondary sources provide material concerning the discourse surrounding the collaborative procurement that can be analysed. Third, both organisations are responsible for managing the capability that is being procured, which provides further comparison for role expansion incentives. Finally, procurement contracts are ideal for case study analysis in that they have a beginning and an end so that initial procurement policy and contract outcomes can be clearly identified. Further, these contracts are relatively recent and so it was easy to gather participants' recollection of events and to find information about the contracts through contemporary online sources.

Other capital investment programmes that involved contracting, and that could have been used as case studies, include joint procurement of 'off-the-shelf' satellite capabilities. For example the EDA's SatCom[263] programme could have been compared to NATO's satellite procurement activities.[264] NATO has a long-standing infrastructure programme, and NATO's Communications and Information Agency (NCIA) presides over NATO's communication infrastructure programmes.[265] It procures much of the organisation's satellite capacity and also its recently developed Air Command and

263.https://www.eda.europa.eu/info-hub/press-centre/latest-news/2016/06/20/eda-and-csdp-civilian-missions-develop-cooperation Accessed July 2017

264.https://www.ncia.nato.int/NewsRoom/Pages/160726_Announcement_3billion_investments.aspx Accessed September 2018

265. https://www.ncia.nato.int/Our-Work/Pages/Infrastructure-Services.aspx Accessed September 2018

Control System (ACCs).[266] Finally, the EU Commission and the EU Space Agency run the EU's Galileo programme.[267] These examples all entail collaborative procurement contracts for surveillance capability. The thesis did not include these case studies and this is justified below.

First regarding practical aspects, the broadening of the study to include these case studies would have increased the workload of the thesis substantially. The inclusion would also have necessitated some loss of detail on the existing case study analysis. These case studies could have provided additional support for the conclusions concerning the strength of civil security culture, the emphasis on Western 'community of values' missions and the role of multilateralism in the balance of the drivers for collaboration. Second, the nature of the ACCs procurement and the Galileo programme, given that product development is involved, generates sensitivities over data gathering that would have made research quite difficult. These case studies would also not be a strict comparison given the development aspects of the procurement versus the two 'off-the-shelf' case studies that were chosen (although some development is involved in the Eurosur communication network).

NATO's AGS Programme

NATO's AGS programme has been in the process of acquisition for the last 20 years, and should come into operation in 2018.[268] The capability consists of five Global Hawks and the related ground stations. Although NATO is primarily a military

266. https://www.ncia.nato.int/Our-Work/Pages/airc2.aspx Accessed September 2008

267. http://ec.europa.eu/growth/sectors/space/galileo/history_en Accessed September 2018

268. FIORENZA, N. 2017. AGS Deliveries to be completed in 2018. *Jane's Defence Weekly*.

organisation, the future AGS missions are sometimes presented as civil military.[269] US prime contractor Northrop Grumman is providing the capability. As well as strategic rationale, the case suggests procurement drivers of NATO role expansion, technical imperatives for sophisticated assets, industrial imperatives exhibited via *juste retour* dynamics. There is also evidence of cultural, civil military solution preferences and the importance of multilateral, political objectives of NATO member states in the procurement decision-making.

Frontex

The EU Agency, Frontex has procured a networked surveillance capability to produce a situational picture of the EU borders under its Eurosur regulation. It has also leased aerial surveillance services for monitoring of the EU's transnational borders. It is anticipated that further surveillance equipment will be bought as the agency expands its mandate.[270] The procurement policy and processes demonstrated drivers of strategic rationale, EU role expansion, and strategic cultures of Western 'community of values' encouraging the role of surveillance and specific civil military solutions at the EU borders.

269. See the Northrup Grumman page demonstrating the AGS capability: http://www.northropgrumman.com/Capabilities/NATOAGS/Documents/pageDocuments/NATO_AGS_Brochure.pdf Accessed November 2017

270. http://frontex.europa.eu/news/frontex-the-european-border-and-coast-guard-agency-after-one-year-OB6UIM Accessed November 2017

Conclusion

Collaborative procurement takes place in complex political, security and organisation environments. This chapter outlined the theoretical frameworks and methodological approach that will be used to analyse the international security and organisation context of multilateral procurement of a surveillance capability. It described the different theoretical frameworks and justified the combination of theories that are used. It notes that similar frameworks have been used by academics to study both procurement and NATO and EU behaviour. This research combines institutional approaches with organisation studies to address the gaps in the literature, namely cultural influences on collaborative procurement of a security capability. These theoretical frameworks extend the scope of previous procurement studies to consider organisation and other non-state actors. They expand the analysis to include the strategic cultures associated with surveillance capabilities and their effects upon procurement processes.

Specifically, the chapter examined the theoretical approaches of Strategic Choice, Institutionalism and Organisation Theory. For each approach it outlined the background of the theory, noted criticisms of the theory, described how the thesis addresses those criticisms and uses the theory to address the research question. The chapter demonstrated that the theoretical frameworks would provide the ability to consider evidence of calculus or culture in NATO and EU procurement processes. Finally the chapter explained the choice of case studies and the qualitative methods used to analyse the case studies. These theoretical frameworks and methodology provide a comprehensive toolbox to enable the research question to be answered.

The next two chapters consider the context within which the procurement decisions are taken. Chapter Two examines the Western security context for the procurement of surveillance and its associated networks and platforms. Chapter Three considers the organisation environment within which the procurement processes take place.

Chapter 2: Western Security Context and Culture affecting the Procurement of Surveillance Capability

Introduction

The Western European security environment provides explanations of the driving forces behind joint procurement of surveillance capabilities. This chapter considers these drivers, the range of surveillance missions and surveillance solutions. Macro context factors feed down from member states into procurement activities at the organisational level. In seeking to answer whether multilateral procurement is driven by calculus or culture, three aspects are considered. First, Western and member state[271] security strategies and their strategic cultures may motivate procurement for surveillance security solutions. Second, technical and industrial imperatives may generate military industrial complex dynamics, these drive procurement for technical and economic gains. Third, cost efficiency motives may encourage 'collaborative' or 'multilateral' procurement. This is relevant in an era of austerity and where equipment is expensive. Realist academics assert that cooperative acquisitions occur where assets are expensive, as with the former NATO cases of AWACS and C-17 Transporter Aircraft, and where militaries stand to gain additional technical expertise.[272]

271. The 'member states' referred in this chapter are those member states of NATO and the EU.

272. TERLIKOWSKI, M. 2012. Not As Smart As It Could Be: the NATO Smart Defence Initiative—Chicago and Beyond. *PISM Strategic Files*, 1-5. p.3

The research recognises joint acquisition involves a chain of decision-making, regarding aspects such as the validity of the capability requirement, funding priority, procurement strategy and contract terms. At each stage different drivers may exert a greater influence on the process. Thus calculus drivers may be necessary to initiate the acquisition policy but are not always sufficient to obtain the final political support for the implementation of a joint procurement. The research therefore will also consider cultural drivers for collaborative procurement in the macro environment, where consensus is achieved through adherence to societal, symbolic systems such as the Western 'community of values', acceptable civil military security solutions, and symbolic security alliances. Here member states and their organisations, NATO and the EU, refer to their constituencies' expectations for the provision of security. Such cultural drivers here combine with calculus incentives to yield multiple member state political support for collaborative procurement.

Collaborative procurement is problematic for a number of reasons. It is politically risky where a shared capability involves loss of control and technical expertise. Particularly if that capability is owned and operated by the acquiring organisation.[273] It is time consuming where multiple member states cannot agree to the security policy underlying the procurement due to differing opinions.[274] Varying requirements for the specification of equipment from different member states also introduce complexities.[275] Further, it

273. BRADDON, D. & HARTLEY, K. 2013. More for less? Exploring the Economic dimensions of multilateral collaboration in military aerospace projects. *Journal of Defense Studies & Resource Management,* 2.2.

274. DEVORE, M. R. 2011. The Arms Collaboration Dilemma: Between Principal-Agent Dynamics and Collective Action Problems. *Security Studies,* 20**,** 624-662. p.634

275. Such as the Transall aircraft developed by France and Germany in 1959 ibid. p.648

becomes inefficient when member states require work share for their national industries,[276] and *juste retour* dynamics lead to suboptimal production solutions. Finally, rivalry between companies collaborating to provide the solution may also incur inefficiencies.[277] There are many such examples of inefficient or unsuccessful joint aerospace projects due to these reasons. Two examples are NATO's Lightweight Strike and Reconnaissance Aircraft in 1954, where some member states refused either to buy the aircraft or to participate in the collaboration because of industrial concerns.[278] Further, inefficient development and procurement of the Eurofighter Typhoon was also blamed on work share considerations.[279] This research considers 'off-the-shelf' acquisitions, where development is less of a consideration. An example of an 'off-the-shelf' successful collaboration, covered in this chapter, is NATO's AWACs[280] (Airborne Early Warning and Control System) procurement, bought from a US contractor in the 1970s.

What then are factors that can make 'joint' (collaborative and multilateral) procurement of security equipment and capability palatable to NATO and EU member states? First, the chapter identifies member states' security priorities that generate a requirement for a joint surveillance capability. Security strategies during this period reflect a post 9/11 security agenda and reveal a focus on threats to citizen safety and other trafficking

276. Ibid. p.634

277. Ibid. p.635

278. Ibid. p.643

279. HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform. p.23

280. http://www.nato.int/cps/in/natohq/topics_48904.htm Accessed July 2017

crimes that require civil military solutions.[281] Surveys show that terrorism, cross-border crime and immigration were also high on the public agenda at this time.[282] This section of the chapter also considers cultural demands for surveillance capability. These include societal expectations to save migrants' lives rather than merely monitoring and controlling borders for transnational crime. The study argues that this ideational incentive for the procurement of surveillance derives from the West's projection of a 'community of values'.

Second, the chapter considers member state attitudes to the supply of border surveillance capability. It considers industrial imperatives, and outlines different surveillance solutions offered by industry and their implications for procurement processes. The chapter then considers the importance of European security and defence industry to member states, and whether procurement specification decisions are likely to be affected by sponsorship and *juste retour* dynamics. Two cultural explanations for the increasing demand and supply of surveillance solutions are considered: the culture related to the US Revolution in Military Affairs (RMA) is linked to procurement of sophisticated surveillance solutions; and the civil military security culture emphasising civil security over defence.

281. KAUNERT, C., LÉONARD, S. & PAWLAK, P. 2012. *European homeland security: a European strategy in the making?*, Routledge.

282. EUROBAROMETER 2015. European's Attitudes Towards Security. Brussels: Directorate-General for Migration and Home Affairs.; GERMAN MARSHALL FUND 2014. Transatlantic Trends: Key Findings 2014. *http://trends.gmfus.org/files/2012/09/Trends_2014_complete.pdf accessed February 2016.*

Last, the 'collaborative' aspects of the procurement processes are examined. This has cultural implications where the multilateral nature of the organisation drives member state agreement to the procurement policy and process for political reasons. The research also explores rational, calculus objectives for joint procurement such as joint functionality and cost savings.

Do threats or cultural imperatives encourage collaborative procurement of a surveillance capability?

The research begins by identifying strategic drivers for Western member states to procure a transnational surveillance capability for both military and civil military requirements. NATO's AWACs procurement in the 1970s was partly in response to the direct military threat of Soviet fighter jets. NATO's existing Air Defence Ground Environment radar chain provided insufficient warning capacity so an Airborne Early Warning (AEW) capability was needed.[283] After the end of the Cold War these military threats receded and the definition of security broadened and deepened to include non-military threats, and the security of individuals as well as the state itself.[284] Military requirements for joint surveillance capabilities, such as targeting and reconnaissance, were widely used in expeditionary warfare and crisis management in the Gulf and the Balkan campaigns.[285] This research suggests that, at a societal level, contemporary

283. NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School. p.19

284. MAWDSLEY, J. 2013b. A European Agenda for Security Technology: From Innovation Policy to Export Controls. *Flemish Peace Institute, Report.* p.10

285. GOURE, D. 2013. *Global Precision Strike*, Lexington Institute.; SCHAKE, K. 2002. Constructive Duplication. *Reducing EU reliance on US military assets, London: Centre for European Reform*.; HURA,

requirements for the procurement of joint security surveillance capability have broadened from traditional military and defence functions to include civil military and security functions: first, where member state security strategies identify human security threats of terrorism, cross border crime or trafficking that can be tracked back to illegal transnational movement over European borders; and second, where the Western 'community of values' generates a concern for migrant safety which requires border surveillance solutions. It must be noted that these requirements entail different surveillance requirements and solutions from the traditional defence specifications. The driving forces for joint surveillance requirements are articulated by political elites, and reflect societal concerns and priorities. Data such as national security strategies, recent public surveys and other contemporary expressions of security concerns were analysed to provide evidence.

Security Strategies and Public Opinion regarding Security

Member state and regional security strategies lead directly to the approval of security and defence budgets and subsequently to procurement plans. These data are important for discerning the origins of policy and subsequent requirements and procurement of surveillance capability. Security strategies generate rational solutions to protect the interests of the state or region, and are classified as calculus for the purposes of this study. Recent security strategies are concerned traditional threats that require military surveillance solutions, but also identify threats that are linked to illegal transnational movements of people. These lead to civil military surveillance policies and security solutions to monitor these movements.

M., MCLEOD, G., LARSON, E., SCHNEIDER, J. & GONZALES, D. 2000. Interoperability: A continuing challenge in coalition air operations. RAND CORP SANTA MONICA CA. p.83

Western member states have diverging attitudes to joint defence and security functions such as surveillance. The 'West' is often referred to as a 'security community', within which member states do not present a military threat to each other.[286] Western security policies may be viewed as coherent and actor driven, via member states, NATO or the EU. But the reality is that opinions and security requirements are fragmented within the security community.[287] This means that it is difficult to gain political will for joint action. The literature considers diverging attitudes to threats within the West and its organisations such as NATO.[288] Member states can be grouped by their attitude towards threats such as those who are concerned about crisis management in failed states, or those that still fear Russia. These can be divided into 'older' European States, such as France and Germany, and 'new' European States, such as Estonia, Lithuania or Romania, who have a greater need for support from collaborative security measures. Attitudes to border security are also divided. For example, the vague wording about standardising European Border Controls in the concluding statement of the Laeken European Council

286. DEUTSCH, K. W. 1968. *The analysis of international relations*, Prentice-Hall Englewood Cliffs, NJ.; ADLER, E. & BARNETT, M. N. 1998. *Security communities,* Cambridge, Cambridge University Press.

287. HALLAMS, E. & SCHREER, B. 2012. Towards a 'post-American' alliance? NATO burden-sharing after Libya. *International Affairs,* 88**,** 313-327.; MORAVCSIK, A. 1998. *Centralization or fragmentation? Europe facing the challenges of deepening, diversity, and democracy*.; LÉONARD, S. 2009. The creation of FRONTEX and the politics of institutionalisation in the EU external borders policy. *Journal of Contemporary European Research,* 5**,** 371-388. p.377; FALEG, G. & GIOVANNINI, A. 2012. The EU between Pooling and Sharing and Smart Defence. *Making a virtue a necessity*.

288. NOETZEL, T. & SCHREER, B. 2009. Does a multi-tier NATO matter? The Atlantic alliance and the process of strategic change. *International Affairs,* 85**,** 211-226.; JONSON, P. 2010. The debate about Article 5 and its credibility. What is it all about? *Research Paper,* 58**,** 12.; BAILES, A. 2011. Europe's Security, Attitudes, Achievements and Unsolved Challenges. *In:* CROCKER, C., HAMPSON, F. O. & AALL, P. (eds.) *Rewiring Security in a Fragmented World.* p.288

in 2001 reflected member state disagreements.[289] Diverging attitudes to the migration crisis makes joint policy and procurement difficult and leads to compromised solutions. The table below has attempted to group member state attitudes towards the threat of transnational movement of people according to their security objectives.

This research examined the security strategy documents of those member states who have collaboratively procured surveillance capability through NATO or the EU. Security strategies are published on a regular basis, every five to ten years. The strategies become dated as the security situation evolves, for example the escalation in terrorist attacks and increased migrant flows. The research seeks to supplement analysis of national security strategy documents with recent surveys from Transatlantic Trends and the Eurobarometer.[290] These surveys give a different perspective of the general public as opposed to political elites, and also inform policy and procurement decisions. Society input into defence and security policy is documented in the literature[291] and this study demonstrates how this input translates into organisational procurement processes.

European member states concerned with procuring a joint surveillance capability include France, Germany, Spain, Italy, Greece and the smaller states, which include

289. LÉONARD, S. 2009. The creation of FRONTEX and the politics of institutionalisation in the EU external borders policy. *Journal of Contemporary European Research,* 5**,** 371-388. p.377

290. GERMAN MARSHALL FUND 2014. Transatlantic Trends: Key Findings 2014. *http://trends.gmfus.org/files/2012/09/Trends_2014_complete.pdf*
accessed February 2016.; GERMAN MARSHALL FUND 2013. Transatlantic Trends: Key Findings 2013.;

291. HEIDENKAMP, H., LOUTH, J. & TAYLOR, T. 2011. The Defence Industrial Ecosystem, Delivering Security in an Uncertain World. *In:* RUSI (ed.). London: RUSI.

Norway, Romania, the Czech Republic, Slovakia and Bulgaria.[292] The US is the major contributor to NATO's Alliance Ground Surveillance (AGS) capability and for this reason its security strategy is included. Member states are grouped in the table below in three categories with differing characteristics: First, industrial powers, for example Germany, France and the US whose military and security and defence industries are nationally important and who often actively partake in joint military action such as those campaigns in Iraq, the Balkans and Libya; second, EU member states such as Italy, Greece and Spain with significant shoreline and illegal migration concerns that require civil security and civil military solutions; and third, 'new' Eastern member states that may include Bulgaria, Slovenia and Romania. These second two groups contribute to joint military missions but have less of a military culture. Multilateral security strategies from the EU and NATO are also considered as well as the surveys of Eurobarometer and Transatlantic Trends. The information on the security strategies are summarised here but may be found in greater detail in the attached Annex.

292. Britain does not participate in joint aerial surveillance procurement case studies, so is not included in the overview.

Political Elite	Dominant threats relevant to joint surveillance solutions	Solutions considered
Industrial Powers: France[293]; US[294]; and Germany[295]	Terrorism, trafficking and cross border crime, consequences of failed states (and related crisis management requirements), international military obligations	Emphasis on the need for pre-emption and a strategy of 'knowledge and anticipation'; France indicates that Frontex is part of the solution[296] to trafficking; France and Germany mention surveillance in a military context;
'Border' EU States: Italy,[297] Greece,[298] Spain[299]	Terrorism and trafficking. Italy and Spain show heightened concerns with organised crime; Support of joint crisis management efforts of NATO and ESDP;	Spain mentions the private sector regarding security solutions and migrant management; Italy crisis management involving civil sector;

293. THE REPUBLIC OF FRANCE 2013. French White Paper, Defence and National Security.

294. JOINT CHIEFS OF STAFF 2015. The National Military Strategy of the United States of America. *In:* OFFICE OF THE SECRETARY OF DEFENSE (ed.). Washington.; THE WHITE HOUSE 2015. United States National Security Strategy. Washington.

295. GERMAN FEDERAL MINISTRY OF DEFENCE 2006. German White Paper 2006 on German Security Policy and the Future of the Bundeswehr.

296. THE REPUBLIC OF FRANCE 2013. French White Paper, Defence and National Security. p.103

297. DI CAMILLO, F. & MARTA, L. 2009. National Security Strategies: the Italian case. *Documentos de Trabajo (Real Instituto Elcano de Estudios Internacionales y Estratégicos)***,** 1.

298. DOKOS, T. 2007. Greek Security Policy in the 21st Century. *ELIAMEP Policy Paper No.9.* Athens: Hellenic Foundation for European and Foreign Policy.

299. SPANISH PRESIDENCY OF THE GOVERNMENT 2013. The National Security Strategy, Sharing a Common Project. Spain.

Political Elite	**Dominant threats relevant to joint surveillance solutions**	**Solutions considered**
'New' Eastern States: Bulgaria,[300] Slovenia and Roumania[301]	Proliferation and development of terrorist networks, transnational organized crime, illegal trafficking in people, drugs, arms and ammunition, strategic and radioactive materials; clandestine migration and the emergence of some massive flows of refugees;	Focus on cooperative solutions; Security solutions written very much in relation to multilateral agencies of NATO and the EU
Multilateral security strategies: EU agencies[302]	Terrorism, Organised Crime, Cyber Crime	International cooperation; Better information exchange[303]
NATO[304]	Weapons Proliferation, terrorism, transnational illegal activities, instability beyond NATO borders	Collective defence, Counter Terrorism, crisis response

300. BULGARIAN DURZHAVEN VESTNIK 2011. National Security Stategy of Bulgaria. National Assembly Decision No 19/8.032011.

301. MINISTRY OF NATIONAL DEFENCE 2014. Romania's National Security Strategy.

302. EU COUNCIL 2010. Internal Security Strategy for the European Union: 'Towards a European Security Model'. Brussels: Council of the European Union.; EUROPEAN COMMISSION 2015a. The European Agenda on Security. Strasbourg.; EUROPEAN COMMISSION 2014a. The EU Explained: Borders and Security. *In:* DIRECTORATE GENERAL FOR COMMUNICATION (ed.). Brussels. p.9

303. EUROPEAN COMMISSION 2015a. The European Agenda on Security. Strasbourg.

304. NATO 1999a. The Alliance's Strategic Concept. Washington D.C.; NATO 2010b. Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization. Lisbon: NATO.

Public opinion		
Special Eurobarometer 432:305	Financial crises, poverty and corruption; also external factors including terrorism, organised crime and irregular migration.	Only 32% of respondents consider that EU institutions and agencies should play an important role.
Transatlantic Trends 2014:306	Issues of mobility, migration, and integration connect with foreign, security, economic, and social policy.	The West still consider that NATO is essential as an institution and support NATO carrying territorial defense as a mission.

Figure 2. Macro level member state threat perception

While awareness of international crisis management obligations (which could require military applications of surveillance) are present in the security strategies, four threats relevant to civil military surveillance are identified in this summary: terrorism, organised crime, human trafficking or clandestine migration, and failed states in EU neighbourhood regions. Terrorism and organised crime represent direct threats to member state citizens. Human trafficking and illegal immigration represent indirect threats of migrant integration and assimilation costs, political upheaval, citizen unrest and physical threats as crime rises through increased population numbers in poverty.[307]

305. EUROBAROMETER 2015. European's Attitudes Towards Security. Brussels: Directorate-General for Migration and Home Affairs. (28,082 respondents interviewed face to face in their mother tongue)

306. GERMAN MARSHALL FUND 2014. Transatlantic Trends: Key Findings 2014. *http://trends.gmfus.org/files/2012/09/Trends_2014_complete.pdf accessed February 2016.* (1000 people in 13 countries US, Turkey, Russia, France, Germany, Italy, the Netherlands, Poland, Portugal, Sweden, Spain and the UK, computer assisted telephone interviews)

307. BAILES, A. 2011. Europe's Security, Attitudes, Achievements and Unsolved Challenges. *In:* CROCKER, C., HAMPSON, F. O. & AALL, P. (eds.) *Rewiring Security in a Fragmented World.* p.289

All of the threats are manifest in illegal transnational movements of people. Here, prevention and anticipation of the threat is preferable, and a joint border surveillance capability enables this.[308]

Surveillance aids measures to address the threats identified by member states in their security strategies. It has grown in importance in recent security solutions. Some academics link this to the US RMA culture where information gathering is given the same priority as kinetic activity.[309] It fulfils requirements for reconnaissance and targeting in military missions, it fulfils requirements for 'situational awareness' that is important in civil military missions to prevent illegal, transnational movements of people. It does not stop illegal movements, but informs and alerts security officials about the location and nature of the movements. Countries with EU borders, such as France, Spain, Greece and Italy, have direct security interests in border surveillance that monitors illegal transnational movements. The US does not share direct European border threats, so has other motivations to contribute to NATO's joint surveillance programmes. Other non-border countries, such as Estonia and Lithuania also contribute to surveillance capabilities in both the EU and NATO and do not face the direct threat of transnational movements from neighbouring countries. For the US and these non-border member states additional calculus or cultural explanations for the joint procurement is needed, such as industrial motivation, multilateral motivation, or simply cost efficiency motivation. These are explored in the following paragraphs.

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308. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.

309. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.

Cultural Demands for Surveillance

Western member states identify themselves as a 'community of values'.[310] These values include democracy, peace and human rights. Member states use international organisations, such as the UN, NATO and the EU to uphold these values.[311] This research considers the literature that articulates the 'community of values'.[312] This section considers whether these views inform policy for the procurement of multilateral surveillance capability.

The Western cultural context can affect policy for the procurement of surveillance capabilities, where the 'community of values' informs strategic culture.[313] Strategic culture is 'a number of shared beliefs, norms and ideas within a given society that generate specific expectations about the respective community's preferences and actions in security and defence policy.'[314] In this context, a community's security and defence identity, expressed through its preferences and behavioural patterns, derives from shared

310. WAGNSSON, C. 2010. Divided power Europe: normative divergences among the EU 'big three'. *Journal of European Public Policy,* 17**,** 1089-1105.; PERKOWSKI, N. 2012. A normative assessment of the aims and practices of the European border management agency Frontex. Oxford: Refugees Studies Centre.

311. ABBOTT, K. W. & SNIDAL, D. 1998. Why States Act through Formal International Organizations. *Journal of Conflict Resolution,* 42**,** 3-32.

312. PUGH, M. 2001. Mediterranean Boat People: a case for co-operation? *Mediterranean Politics,* 6**,** 1-20.; PARLIAMENTARY ASSEMBLY 2013. The "left-to-die boat": actions and reactions. *In:* COUNCIL OF EUROPE (ed.). Brussels: Council of Europe,.; HELLER, C., PEZZANI, L. & STUDIO, S. 2011. Left to Die Boat. *In:* FORENSIC ARCHITECTURE (ed.). London: Centre for Research Architecture, Goldsmiths College.; LAWRENCE, M. 2014. Helping Europe with its Sea. Small Wars Journal.; RIJPMA, J. J. 2010. Frontex: successful blame shifting of the Member States? *Elcano Newsletter***,** 6.

313. PERKOWSKI, N. 2012. A normative assessment of the aims and practices of the European border management agency Frontex. Oxford: Refugees Studies Centre.

314. BIEHL, H., GIEGERICH, B. & JONAS, A. 2013. *Strategic Cultures in Europe*, Springer. p.12

experiences and accepted narratives specific to a particular security community. Strategic culture is an attribute of the whole international system, where political elites share experiences and beliefs on security, stability and peace.[315] National and international diplomatic services, epistemic communities and political elites are the agents of the formation and diffusion of strategic culture.[316] This culture shapes preference for certain security solutions such as border surveillance.[317]

The West has a shared sense of values and history. The EU is particularly linked to these values with Article 2 of the Lisbon Treaty specifically referring to fundamental rights:

> The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail.[318]

These cultural concerns represent values that the West wants to uphold[319] proactively and are rooted in Christian ideas of progress and civilisation. They encompass ideals of

315. ATTINA ATTINÀ, F. 2004. The Building of Regional Security Partnership and the Security Culture Divide in the Mediterranean Region.

316. Ibid.

317. Ibid.

318.http://www.lisbon-treaty.org/wcm/the-lisbon-treaty/treaty-on-european-union-and-comments/title-1-common-provisions/2-article-2.html

319. WAGNSSON, C. 2010. Divided power Europe: normative divergences among the EU 'big three'. *Journal of European Public Policy,* 17**,** 1089-1105.

progress, compassion and humanity.[320] Where these values are articulated and propagated by academic, intellectual and liberal commentators they inform and influence policy. This cultural impetus, in relation to immigration, initially appeared in the literature through commentary on the militarisation of border surveillance,[321] and latterly through observations on the treatment of migrants, as they make their journey to Europe.[322] Previous studies have explored the promotion of community values as part of member state, NATO and EU discourse,[323] but none have examined the implications on the policy for joint procurement of a security capability. Member state political elites identify strategic demands for border surveillance via security strategies under the influence of this culture. While this study does not examine the origins of the culture, it

320. MEYER, J. W., BOLI, J. & THOMAS, G. M. 1987. Ontology and Rationalization in the Western Cultural Account. *In:* THOMAS, G. M., MEYER, J. W., RAMIREZ, F. O. & BOLI, J. (eds.) *Institutional Structure Constituting State, Society and the Individual.* Newbury Park: Sage Publications.

321. BIGO, D. 2002. Security and Immigration: Toward a Critique of the Governmentality of Unease. *Alternatives: Global, Local, Political,* 27**,** 63.; BIGO, D. 2006. Globalized (in) security: the field and the ban-opticon. *Illiberal Practices of Liberal Regimes: The (In) Security Games, L'Harmattan: Paris***,** 5-49.; LUTTERBECK, D. 2005. *Blurring the Dividing Line: The Convergence of Internal and External Security in Western Europe*, Routledge.; HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.

322. HELLER, C., PEZZANI, L. & STUDIO, S. 2011. Left to Die Boat. *In:* FORENSIC ARCHITECTURE (ed.). London: Centre for Research Architecture, Goldsmiths College.; AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.; MUIŽNIEKS, N. 2015. Crisis in the Mediterranean: Europe must change course. *openSecurity*.; HELLER, C. & PEZZANI, L. 2015. Death by Rescue. Forensic Oceanography.; NIELSEN, N. 2014. EU border surveillance system not helping to save lives. *euobserver*.; HELLER, C. & JONES, C. 2014. Eurosur: Saving Lives or Reinforcing deadly borders? *Statewatch,* Vol 23 no 3/4.

323. WAGNSSON, C. 2010. Divided power Europe: normative divergences among the EU 'big three'. *Journal of European Public Policy,* 17**,** 1089-1105.; SCHIMMELFENNIG, F. 2003. *The EU, NATO and the Integration of Europe*, Cambridge University Press.; PERKOWSKI, N. 2012. A normative assessment of the aims and practices of the European border management agency Frontex. Oxford: Refugees Studies Centre.

is concerned to see how these ideas drive multilateral procurement of a surveillance capability used to monitor transnational borders.

Cultural discourse enters procurement processes in three ways. First, via a body of literature that comments on the activities of border surveillance and the practice of surveillance in a security context. These commentators encourage political leaders to take additional measures that prioritise migrants' fundamental rights and their humane treatment.[324] Second, organisations, such as NATO and the EU, adopt these cultural concerns in their security policy and organisation documents. For example the 2015 'European Agenda on Security' lists the principles to which security practices should refer.[325] These include value-based principles of full compliance with 'fundamental rights'. Third, member state representatives use may cultural arguments to gain approval for the procurement of surveillance capability in their national forums.[326] Evidence for these arguments is presented in the case studies in Chapter Four and Chapter Five. It must be noted that, with respect to these last two points, the use of cultural arguments are often utilitarian and mask other drivers of policy and

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324. HELLER, C., PEZZANI, L. & STUDIO, S. 2011. Left to Die Boat. *In:* FORENSIC ARCHITECTURE (ed.). London: Centre for Research Architecture, Goldsmiths College.; AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.; MUIŽNIEKS, N. 2015. Crisis in the Mediterranean: Europe must change course. *openSecurity*.; HELLER, C. & PEZZANI, L. 2015. Death by Rescue. Forensic Oceanography.; NIELSEN, N. 2014. EU border surveillance system not helping to save lives. *euobserver*.; HELLER, C. & JONES, C. 2014. Eurosur: Saving Lives or Reinforcing deadly borders? *Statewatch,* Vol 23 no 3/4.

325. EUROPEAN COMMISSION 2015a. The European Agenda on Security. Strasbourg. p.3

326. HEIDENKAMP, H., LOUTH, J. & TAYLOR, T. 2011. The Defence Industrial Ecosystem, Delivering Security in an Uncertain World. *In:* RUSI (ed.). London: RUSI. p.16; BUNDESTAG 2014. Minor Interpellation tabled by Member Andrej Hunko et al. and the parliamentary group of The Left Party; Launch of the European Border Surveillance System (Eurosur). Berlin. p.14; Interview with Erling Wang; Jim Edge.

procurement. As Nicholas Wheeler observes, references to a legitimising, humanitarian context to justify action does not mean that the actors (here NATO or EU staff, member state representatives and industry actors) believe in the context, rather it reflects that a prevalent 'norm' obliges action in this frame of reference.[327] Thus these actors refer to the humanitarian values of their community as a means of achieving their security objectives for accurate situational pictures and intelligence regarding the location of migrant boats.

This section has outlined elements in the Western macro context that are responsible in part for driving the procurement of a surveillance capability. These included strategic drivers of military mission requirements and the civil military requirements for the monitoring of illegal transnational movements of people, related to terrorism, human trafficking and organised crime. It also considered cultural drivers for joint surveillance through a projection of the 'community of values' that demands protection of endangered migrants' lives and fundamental rights. The section noted that member states have diverging perceptions of threats that make agreement for joint surveillance policy difficult. It observed that not all member states identified direct threats that justified joint procurement of surveillance in their security strategies. Further, surveillance is not a counter measure against identified threats; it merely informs counter measures taken. It acknowledged however, that the strategic culture of the West could unify member state objectives and drive procurement decisions for joint surveillance capabilities. While this section has considered the threats that generate

327. WHEELER, N. J. 2000. *Saving strangers: Humanitarian intervention in international society*, OUP Oxford. p.9

joint surveillance requirements, the next section considers industrial and technical imperatives that also encourage joint procurement of surveillance assets.

Member State Industrial and Technical Imperatives for the Procurement of Surveillance

Technical imperatives drive member states to procure joint surveillance capability in order to gain domestic expertise. Industrial imperatives mean that member states support their national industries' participation in multilateral procurement to benefit from the related economic growth and skills preservation or creation. As the current General Manager of the AGS Programme states:

> '....The key premises of any multinational programme..., lets say there are two key premises, one is industrial participation, which means work share. What it is in it for my country's industry? The second one and very close to that is technology transfer.'[328]

Both imperatives are manifested in work share demands in the contract, often in the guise of *juste retour*.

Contemporary surveillance solutions vary with respect to scale and technology. These factors influence the likelihood of a technical imperative for member states to procure the solution and / or to support an industry tender. Surveillance solutions differ in requirements from the most sophisticated military specifications, used in reconnaissance and targeting functions, to simpler civil security applications used for border

328. Personal Interview with Jim Edge

surveillance and other monitoring functions. The few companies who own the relevant intellectual property provide specialist military radar solutions. A wider range of companies provides civil military surveillance solutions, as barriers to entry are much lower for less sophisticated surveillance equipment.

This section describes the evolution of optical, radar and infrared surveillance equipment. It tracks the innovations in surveillance assets that were initially led by military requirements and then the evolution of the private sector and commercial, civil security requirements. It concludes that industry, rather than government, now leads innovation in this field. Then it considers the nature and relative strengths of corporations in the defence sector versus the security sector in relation to technical and industrial imperative drivers within the procurement process. The section also explores cultural attitudes to the defence and security industries and surveillance solutions. First, in relation to the US RMA where there is rivalry, or aspiration to acquire technical skills, with reference to the military capabilities of the US.[329] Second in relation to Western 'community of values', the European preference for soft power, and attitudes to dual use, civil military surveillance solutions supplied by the civil security industry.[330] It considers if cultural attitudes to industry and surveillance solutions drive member state support for joint, civil military surveillance solutions, over pure military and defence applications.

329. MÖRTH, U. 2003. Framing an American Threat: the European Commission and the Technology Gap.

330. LINDLEY-FRENCH, J. 2004. The Revolution in Security Affairs: Hard and Soft Security Dynamics in the 21st Century. *European Security,* 13**,** 1-15.

Surveillance Solutions

Aerial surveillance makes use of optical, radar and infrared capabilities to build a picture of what is happening on the ground or in the air. Data analysis is critically important in the process.[331] This is achieved using digital processing, communication networks and highly trained intelligence analysts. This thesis does not require a deep understanding of technical aspects, but seeks to describe the evolution of a surveillance capability from military to private-sector led innovation, its military and civil military applications, and its monetary value insofar as these factors could affect joint procurement processes.

Aerial surveillance has had military functions since World War 1(WW1) and the early days of the RAF. Optical methods were used during WW1 when surveillance balloons gathered intelligence.[332] In the 1920s, RAF's 45 Squadron flew over Northern Iraq to monitor Kurdish resistance.[333] These early efforts used basic optical capability such as pilot vision, binoculars, telescopes and, to some extent, cameras. Cameras were very bulky in the first quarter of the 20th century. Sophisticated lens development evolved during the 1930's when Japanese companies such as Minolta, Fuji Photo Film and Konishiroku began to produce aerial cameras.[334] Balloons were used for aerial surveillance into the 1950's. For example, Project GENETRIX collected photographic

331. SCHAKE, K. 2002. Constructive Duplication. *Reducing EU reliance on US military assets, London: Centre for European Reform*. p.21

332. PETERSEN, J. K. 2002. *Understanding surveillance technologies: spy devices, their origins & applications*, CRC Press. p.574

333. SATIA, P. 2008. *Spies in Arabia: the Great War and the cultural foundations of Britain's covert empire in the Middle East*, Oxford University Press. p.241

334. PETERSEN, J. K. 2002. *Understanding surveillance technologies: spy devices, their origins & applications*, CRC Press. p.576

images of the Soviet Union for the Americans.[335] However, by the 1960's, airplanes became the primary vehicles for surveillance with US U2 aircraft carrying sophisticated photographic equipment. Space travel and the potential for satellite surveillance also date from this period. The US SAMOS space reconnaissance project included technology related to high magnification image readout and film recovery.[336]

Radar ('radio detection and ranging')[337] was invented in the early 20th century and adapted for both navigation and intelligence generation for early warning systems during World War 2 (WW2).[338] Radar converts electromagnetic surveillance radio waves to electronic impulses that power radar displays, generating 'X-ray like grayscale images'.[339] After WW2 the technology developed to include advanced airborne surveillance systems. These worked with satellites[340] that had the advantage of extending low range radar coverage and reducing the effects of radar terrain masking.[341] Advanced airborne systems were developed by industry and used in military applications of early warning systems, such as the E-3 AWACs aircraft.[342] Industry continued to innovate and in the 1990's sophisticated radars were developed for ground surveillance, with Ground Moving Target Indicators (GMTI) and Synthetic Aperture Radar (SAR) applications. Radar is often used in conjunction with other optical assets

335. Ibid. p.577

336. Ibid. p.580

337. Ibid. p.353

338. Ibid. p.370-373

339. Ibid. p.355

340. Ibid. p.380

341. HURA, M., MCLEOD, G., LARSON, E., SCHNEIDER, J. & GONZALES, D. 2000. Interoperability: A continuing challenge in coalition air operations. RAND CORP SANTA MONICA CA. p.77

342. Ibid. p.79

such as cameras and satellite images. SAR is able to translate returns into three-dimensional images of specific areas, known as 'swathes'.[343] The high resolution of images can be seen in the slide below where SAR images are combined with GMTI information (NB the images are not of the same area).[344]

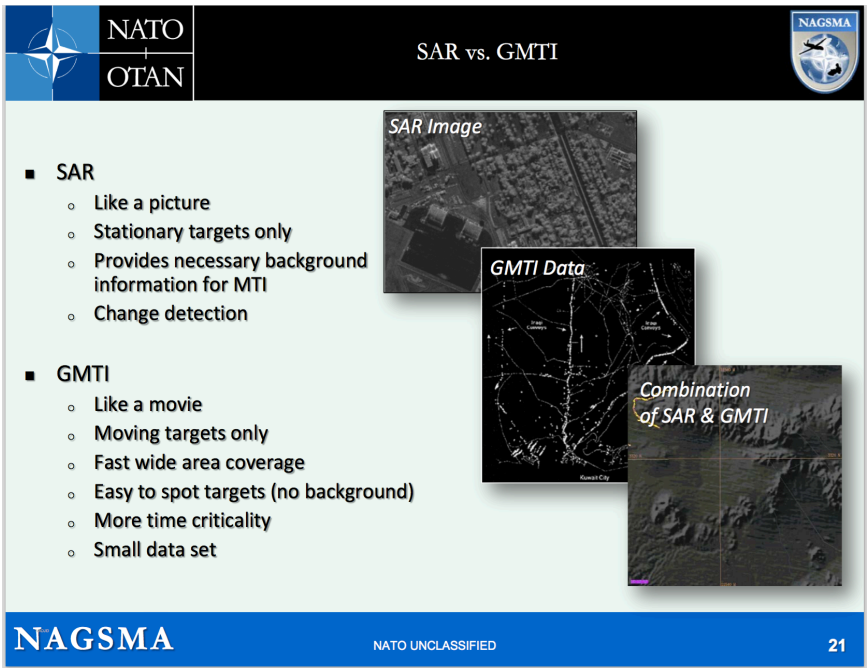

Figure 3. HORVATH, B. 2013. Alliance Ground Surveillance (AGS) A Transformational Capability for NATO; 'Five Elements: Freedom - Information - Security

These surveillance capabilities were used for military target acquisition by US JSTAR aircraft,[345] the UK ASTOR capability,[346] now known as the Raytheon Sentinel, and

343. RIPLEY, T. 2006. Airborne Ground Surveillance - Taking the High Road. *Jane's Defence Weekly*.

344. HORVATH, B. 2013. Alliance Ground Surveillance (AGS) A Transformational Capability for NATO; 'Five Elements: Freedom - Information - Security.

345. PETERSEN, J. K. 2002. *Understanding surveillance technologies: spy devices, their origins & applications*, CRC Press. p.394; HURA, M., MCLEOD, G., LARSON, E., SCHNEIDER, J. & GONZALES, D. 2000. Interoperability: A continuing challenge in coalition air operations. RAND CORP SANTA MONICA CA. p.95

helicopter surveillance assets such as Italian CRESO[347] and French HORIZON[348] assets. Aerial surveillance also has civilian applications monitoring weather, environmental hazards and disasters such as oil spills.[349]

Surveillance imaging is costly where images are long range and complex requiring computer processing.[350] The expense means that access to the capability is often through large corporations or international programmes such as the European Copernicus satellite programme.[351] The expense reflects the value attached to the intellectual property and development of radar technology. This adds a technical imperative for developing a radar, or acquiring one where there is access to the technology.

Infrared sensors are used to detect natural infrared radiation (as opposed to the synthetic radio waves interpreted by radar). They detect 'hot' objects and are used for seeing in the dark or through visual impediments such as low light or haze.[352] As with radar, developments in early infrared surveillance technology occurred during and after WW2.[353] In the 1960's the US developed MIDAS,[354] an infrared sensor designed to

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346. Airborne Standoff Radar; HURA, M., MCLEOD, G., LARSON, E., SCHNEIDER, J. & GONZALES, D. 2000. Interoperability: A continuing challenge in coalition air operations. RAND CORP SANTA MONICA CA. p.96

347. Complesso Radar Eliportato per la Sorveglianza; ibid. p.96

348. Helicoptère d'Observation Radar et d'Investigation de Zone; ibid. p.96

349. PETERSEN, J. K. 2002. *Understanding surveillance technologies: spy devices, their origins & applications*, CRC Press. p.391

350. Ibid. p. 356

351. Ibid.

352. Ibid. p.427

353. Ibid.

detect hot gases from missile launches.[355] By the 1980's, with the invention of UAVs, infrared sensors began to be more widely used in military surveillance and for monitoring civilian disasters such as earthquakes.[356] It became an essential element of aerial surveillance, with the sensors giving the ability to map and monitor the earth from space and the upper atmosphere.[357] Most piloted and unpiloted surveillance aircraft carry infrared and electro-optical sensors to enhance the resolution of imaging.

Governments largely developed initial aerial surveillance capabilities with their related military and scientific interests. However, in the 1990s the private sector became interested in satellite and surveillance images, giving additional impetus to the development of sophisticated aerial photography and resolution. Commercial satellites were launched and, while governments remained the largest customers of these commercial operations, the incentives to develop surveillance technology now came from industry.[358]

Contemporary aerial surveillance is categorised under the technology domain of 'Integrated Platforms'. It is a combination of aircraft, manned or unmanned, that uses radar, cameras and infrared sensors to capture images on the ground, often with surveillance and navigation satellites.[359] Images are transmitted either via line-of-sight radio datalinks or to satellites which then beam the information to operation consoles.

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354. Missile Defence Alarm System

355. PETERSEN, J. K. 2002. *Understanding surveillance technologies: spy devices, their origins & applications*, CRC Press. p.580

356. Ibid.

357. Ibid. p.433

358. Ibid. p.585

359. RIPLEY, T. 2006. Airborne Ground Surveillance - Taking the High Road. *Jane's Defence Weekly*.

The datalinks also vary in sophistication and cost. Radar generates large amounts of data that consume bandwidth and prove difficult to transmit via low-level data links.[360] Data analysis at operation consoles takes place in ground stations, aircraft, and moveable truck stations or on ships.[361] The information is then downloaded onto a central communication network where the information can be distributed to member states. The range of requirements differs significantly from military specifications that require highly accurate, real time images, to simpler civil applications such as border monitoring. These have lower camera specifications and fewer infrared and radar sensors that affect the cost of the solution, and technical drivers of the collaborative decision-making.

At the sophisticated, military end of the market, aerial surveillance may employ UAV technology, such as Global Hawks or Sentinel aircraft. UAVs are expensive to develop and acquire - they are often justified as being cheap in the context of risk to soldiers' lives[362] - but in reality operational costs are higher than equivalent manned options.[363] UAVs have three advantages for missions such as border surveillance: first, they can spend considerable amounts of time in the air before refuelling and therefore are able to cover greater distances compared to other aircraft or border guards on foot;[364] second, personnel need not to be deployed on the ground or sea which reduces costs and risk to

360. Personal Interview with Peter Bondar

361. RIPLEY, T. 2006. Airborne Ground Surveillance - Taking the High Road. *Jane's Defence Weekly*. p.2

362. MARIN, L. 2017. The 'Metamorphosis' of the drone: the governance challenges of drone technology in border surveillance. *Embedding New Technologies into Society: A Regulatory, Ethical and Societal Perspective.* CRC Press.

363. Ibid. p.8

364. Ibid.

life; and third, UAVs can provide information directly to border guards.[365] Three disadvantages of UAVs are: first, the risk of accidents where the UAVs are flying over domestic airspace;[366] second, many UAVs have difficulties operating in bad weather and SAR radar technology for imagery in bad conditions is expensive; and third, the cost of operating / supporting UAVs is high, particularly the training costs.[367] Thus while UAVs are rationally acceptable for the role of surveillance in some respects, there are some disadvantages that mean that objective reasoning may not always support the choice of this surveillance solution.

The private sector contributes significantly to the provision of aerial surveillance solutions. Some solutions may have a lower technical specification where the requirements are for a civil security function, rather than military requirements such as target acquisition. Thus, surveillance asset capability ranges from specialist radar solutions (provided by a small number of suppliers with proprietary technology such as Northrop Grumman(NG)) to low level, 'fee for service' aerial surveillance contracting (offered by multiple low-end contractors). Contractor services are provided by large defence firms such as Lockheed Martin, BAE Systems, Thales and Booz Allen Hamilton, or smaller tech and intelligence focused firms such as Diamond Executive Aviation, EASP Air in Europe, or Intrepid Solutions and TransVoyant LLC in the US.[368] This low-end, 'fee-for-service' aerial surveillance provides a cost effective

365. Ibid. p.8

366. Ibid. p.7

367. Ibid. p.7

368. PARSONS, D. 2012. Companies Seek Profits in Fee-For -Service Surveillance Aircraft. *NDA*.; ABIGAIL, F.-S., BLACK, C., ROSS, A. & BALL, J. 2015. Revealed: Private firms at heart of US drone

capability. Contractors include image analysts to process data,[369] as well as operators for civil military surveillance operations. It allows customers, both military and civilian, to have access to the latest technology without the capital investment and upgrade costs.[370] A primary market for these surveillance services is for border security.[371] Contractors provide further procurement advantages for their customers: first, decision-making is simpler where the capability is not actually acquired; and second, capital investment and training costs are lower.[372] This solution is flexible and efficient, and can be scaled down for low-level requirements.

Little has been written about procurement of aerospace assets and infrastructure relating to the civil military industry, despite the current growth of the civil military security market.[373] A study for the EU (excluding UAVs), estimates the global civil security sector to be worth around €100bn;[374] the airborne surveillance market is currently

warfare. *The Guardian*.; http://www.theguardian.com/us-news/2015/jul/30/revealed-private-firms-at-heart-of-us-drone-warfare accessed February 2016

369. ABIGAIL, F.-S., BLACK, C., ROSS, A. & BALL, J. 2015. Revealed: Private firms at heart of US drone warfare. *The Guardian*.; http://www.theguardian.com/us-news/2015/jul/30/revealed-private-firms-at-heart-of-us-drone-warfare accessed Feb 2016

370. PARSONS, D. 2012. Companies Seek Profits in Fee-For -Service Surveillance Aircraft. *NDA*.

371. Ibid.

372. STREETLY, M. 2008. Contractorised Aerial Surveillance. *UVS International*.

373. DE SILVA, R. 2014. *Global outlook buoyant for the airborne ISR market* [Online]. Available: http://www.defenceiq.com/air-forces-and-military-aircraft/articles/the-global-outlook-for-airborne-isr/ [Accessed February 2016].; FROST AND SULLIVAN 2010. Increased Threat Perception Drives the European Civil Security Air Surveillance Market. Poland.

374. ECORYS 2012. Study on Civil Military Synergies in the field of Security. Rotterdam: European Commission DG Enterprise and Industry.

estimated to be worth over $20 billion and to grow to $43 billion by 2020.[375] This is still small when compared to a global defence industry that is worth around $1.8 trillion.[376] However, the current picture is in flux as the powerful defence industry moves into the high growth security sector via acquisition and product development.[377] Some academics assert that both defence and security corporations have a considerable influence in border surveillance solutions,[378] but the procurement outcomes of this research suggest that civil military / security firms have less influence than their defence counterparts.

The range of sophistication and the cost of aerial surveillance solutions and their affect on the balance of technical and industrial imperatives in joint procurement decision-making are explored next.

Technical and Industrial Imperatives

Technical and industrial imperatives are linked to the 'Military Industrial Complex' where member state governments support their domestic industries and maintain close relations with industrial actors. Three aspects of these imperatives that affect collaborative procurement are explored below: *juste retour* dynamics; EU attempts to counter national protectionism; and the nature of the civil military market compared to

375. DE SILVA, R. 2014. *Global outlook buoyant for the airborne ISR market* [Online]. Available: http://www.defenceiq.com/air-forces-and-military-aircraft/articles/the-global-outlook-for-airborne-isr/ [Accessed February 2016].

376. IISS 2014 figures

377. ANDERSON, G. 2014. M&A full-year report 2014. *Jane's Defence Weekly*.

378. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.; HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.

the defence market. Two further characteristics of the surveillance capability may enhance technical and industrial imperatives in procurement policy and process. First, the size and nature of the surveillance contract influences the importance of the procurement to a member state regarding economic benefits and technical skills. Second, the relative strength of the firm providing the surveillance solution is significant. In the fragmented, civil military security sector, small contractors fulfil simple surveillance requirements such as EASP Air or Diamond Executive Air. These firms are weaker than the defence sector companies such as Lockheed Martin or NG who develop and fulfil highly technical surveillance requirements. This affects their lobbying power with member state governments and their influence on policy and procurement processes.

Member state governments may support national tenders for joint defence contracts, so that their domestic industries might gain technical expertise and other economic benefits. In collaborative procurement, this technical imperative is often exhibited via the principle of *juste retour* and the related demand for workshare.[379] For example, the jointly developed Eurofighter Typhoon is assembled in four different factories throughout Europe.[380] Also the joint project to develop the EURO MALE was criticised because officials warned that unless the three countries involved allowed the workload to "clearly" spread beyond their own national supply chains, they would not have much of a market.[381] While these examples of *juste retour* refer to projects where there is joint product development and production, the dynamic is also found in 'off-the-shelf'

379. HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform. p.19

380. GIEGERICH, B. 2010. Budget Crunch: Implications for European Defence. *Survival,* 52**,** 87-98.

381. TIGNER, B. 2015. EDA Kept to indirect role in MALE initiative. *IHS Jane's 360*.

procurement such as NATO's AWACs requirement in the late 1970's. Here member states demanded 'offsets'[382] in proportion to their level of participation in the acquisition of the capability.[383] 'Off-the-shelf' solutions do not usually need product development and this reduces member state industry gains in technical skills and jobs, giving fewer incentives for *juste retour*.

Member state sponsorship of their domestic industries is routinely experienced in collaborative defence contracts, especially where there is requirement for joint development,[384] but there seems to be a different dynamic when it comes to collaborative, civil military requirements. This leads to more cohesive decision-making where member states are not competing against each other. Member state support of the security sector is weaker than that given to the defence industry for three reasons: first, where there is a EU civil security requirement, member state sponsorship of their national industries can be challenged under EU regulations; second, the low value, fragmented nature of the security sector means that it has a weaker lobbying voice compared to the defence sector; and third, the fragmented nature of the customer base

382. Offsets are 'where the buying nation requires some work to be awarded to its domestic industry, the offset work can be in either its defence industry or elsewhere in the importing economy'. HARTLEY, K. 2014. *The political economy of aerospace industries: a key driver of growth and international competitiveness?*, Edward Elgar Publishing. p.212

383. TESSMER, A. L. 1988. *Politics of Compromise: NATO and AWACs,* Washington DC, National Defense University Press.; WOLF JR, C., CARTER, G. A., CASTRO, R. P., DREYFUSS, D. & MCCALL, J. 1976. 'Offsets' for NATO Procurement of the Airborne Warning and Control System: Opportunities and Implications. DTIC Document.; NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School.

384. HARTLEY, K. & BRADDON, D. 2014. Collaborative projects and the number of partner nations. *Defence and Peace Economics,* 25**,** 535-548. p.539

for civil military solutions means that contracts are of lower value leading to less collaborative procurement activity.

To address the first point, the EU has tried to combat national protectionism in the security sector with legislation and the creation of specialist procurement agencies. Article 346 of the Lisbon Treaty exempts defence equipment from single market competition legislation,[385] but this but this exemption does not extend to security equipment:

> 'with the production of or trade in arms, munitions and war material; such measures shall not adversely affect the conditions of competition in the internal market regarding products which are not intended for specifically military purposes.'[386]

For example, the ruling for Augusta helicopters (Case 337/05) clarified that dual use or equipment supplied to militaries for civilian use was not exempt from single market legislation.[387] Similarly, surveillance assets often have civilian applications that are not limited to military missions and therefore do not qualify under Article 346. Other regulations to counter member state protectionism include the EU Directive on Security and Defence procurement (2009);[388] the Directive on Intra Community Transfers,

385. http://www.lisbon-treaty.org/wcm/the-lisbon-treaty/treaty-on-the-functioning-of-the-european-union-and-comments/part-7-general-and-final-provisions/589-article-346.html Accessed February 2015

386. 2007. Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007 Lisbon.

387. MAWDSLEY, J. 2013b. A European Agenda for Security Technology: From Innovation Policy to Export Controls. *Flemish Peace Institute, Report.* p.39

388. EU COUNCIL 2009. DIRECTIVE 2009/81/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (Defence Procurement Directive). Brussels.

(2009);[389] and the Interpretative Communication on Art 296 TEC, (2006);[390] although it is admitted that in practice these Directives have limited application.[391] Significantly for this research, the directives do not apply to multilateral procurement contracts.[392] Therefore, while security services procurement does not qualify for Article 346 exemption, multilateral procurement is exempt from EU directives aiming to counter protectionism. In principle, member states may still legally insist on a nationally sourced capability in collaborative procurement processes. An example of an EU specialist procurement agency is OCCAR.[393] This procurement organisation tries to emphasise avoidance of member state *juste retour*, as seen in the procurement of the A400M transport aircraft.[394]

Second, the civil security market differs from the defence market. This is partially to do with the sophistication of the solutions offered. Defence firms often have IP interests in products such as sophisticated radars. Few firms are able to offer the high levels of technical expertise required for military solutions. The levels of capital required to

389. Directive 2009/43/EC of the European Parliament and of the Council of 6 May 2009 simplifying terms and conditions of transfers of defence-related products within the Community, OJ L 146/1, 10.6.2009.

390. Commission of the European Communities, *Interpretative Communication on the application of Article 296 of the Treaty in the field of defence procurement,* COM (2006) 779 final, Brussels 7.12.2006.

391. EGUREN SECADES, S. 2011. Openness in the European defence market and company competitiveness. *In:* BAILES, A. & DEPAUW, S. (eds.) *THe EU Defence Market: Balancing Effectiveness with Responsibility.*

392. Ibid.

393. Organisation Conjointe de Cooperation en matiere d'ARmement OCCAR 1998. Convention on the Establishment of the Organisation for Joint Armament Cooperation. Farnborough.

394. MAWDSLEY, J. 2013a. The A400M Project: From Flagship Project to Warning for European Defence Cooperation. *Defence Studies,* 13**,** 14-32.; SIEBERT, B. 2010. Too Big to Fail: The A400M Bail Out. London: RUSI.

develop these products have led to consolidation in the industry and thus the defence industry is characterised by large corporations such as Lockheed Martin, BAE Systems and NG. These corporations have a reputation for lobbying national governments and reinforcing the technical imperative.[395] In contrast, the security market has lower barriers to entry and is currently fragmented with smaller firms having less lobbying power and weaker influence in procurement,[396] although observers have asserted that industrial figures have been integral to the development of European border surveillance policy.[397] Thus there is less potential for the encouragement of a technical or industrial imperative from these weaker firms.

Third, while national defence markets are largely a monopsony, i.e. with a single, powerful, government customer, the demand side for security equipment and services remains fragmented and dispersed.[398] Further, customers are diverse, such as military armed forces or civilian border agencies, and have different approaches to acquisition. This makes collaborative procurement difficult, because there are fewer large contracts and less opportunity for the technical and industrial imperatives to be exhibited.[399]

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395. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.

396. The European Security sector representative body, EOS, represents just over 40 companies, many of which are small. http://www.eos-eu.com/join Accessed January 2018

397. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.; HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.; BAIRD, T. 2018. Interest groups and strategic constructivism: business actors and border security policies in the European Union. *Journal of Ethnic and Migration Studies,* 44**,** 118-136.

398. MAWDSLEY, J. 2013b. A European Agenda for Security Technology: From Innovation Policy to Export Controls. *Flemish Peace Institute, Report.*

399. Ibid. p.36

In sum, technical and industrial imperatives are generated where there is opportunity for technology transfer or economic benefits. High value, defence firms are protected by member state interests to a greater extent than the smaller, fragmented security industry. This support gives defence firms lobbying and negotiating power. Defence companies fulfilling sophisticated, military requirements also have more lobbying power due to the size and nature of the collaborative contracts, and because there are fewer suppliers. Smaller, high growth security firms are consolidating but remain fragmented, which gives them less commercial weight.[400] These companies tend to fulfil low value, contractor surveillance requirements. Here, contractors have low levels of negotiating power, where there is greater competition and less member state support. These characteristics are found to affect industrial input into policy, and more specifically into the procurement process. The case studies will show the varying weights of industrial influence. However, this section also notes evidence of the markets conflating their civil military and defence solutions because of Western demand, with increasing overlap in discourse from both these industry sectors.

Cultural Imperatives for Surveillance Solutions

Cultural factors such as symbolic prestige and a preference for civil military solutions also influence the choice of surveillance solutions.[401] Such as a certain solution being associated with prestige, becoming a symbol of power projection.[402] In the 1970's Eyre

400. MAIDEN, M. 2012. Opportunities for Industry. *In:* ARONSSON, L. & LOUTH, J. (eds.) *Reflections on Industry's Contributions to Smart Defence.* London: RUSI. p.13

401. ATTINA ATTINÀ, F. 2004. The Building of Regional Security Partnership and the Security Culture Divide in the Mediterranean Region.

402. THEE, M. 1986. *Military technology, Military strategy and the Arms Race,* New York, St Martin's Press.;

and Suchman concluded that developing countries procured fighter jets as they were aspiring to national modernity.[403] A similar case may be true for sophisticated surveillance capability driven by an aspiration to emulate US intelligence supremacy.[404] Industrial imperatives for surveillance are affected by two contrasting cultural factors. First, the US RMA culture that emphasises requirements for sophisticated surveillance assets.[405] Second, European security culture preferences have driven the recent growth of the civil military security market, and their orientation towards softer civil security requirements, such as border surveillance, rather than military and defence requirements, such as armaments.[406] These ideas support definitions of acceptable surveillance solutions, where civil security functions are more acceptable to European budgets and procurement.

Marek Thee asserts that doctrine influences procurement[407] and here, US strategic RMA culture may affect surveillance requirements for assets such as sophisticated UAVs. Some argue that Europe is a norm taker from the US when it comes to strategic culture.[408] Where European member states perceive threats of transnational movements,

403. EYRE, D. P. & SUCHMAN, M. C. 1996. Status, norms, and the proliferation of conventional weapons: An institutional theory approach. *In:* KATZENSTEIN, P. J. (ed.) *The Culture of National Security: Norms and Identity in World Politics.*

404. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.

405. DER DERIAN, J. 2009. *Virtuous war: Mapping the military-industrial-media-entertainment-network*, Routledge.

406. KAGAN, R. 2003. Of Paradise and Power: America and Europe in the New World Order (New York: Alfred A. Knopf).

407. THEE, M. 1986. *Military technology, Military strategy and the Arms Race,* New York, St Martin's Press.

408. MACKENZIE, A. 2012. The external dimension of European homeland security. *European Homeland Security: A European Strategy in the Making***,** 95-110.

US doctrines have been natural references for security solutions.[409] Previous studies have considered the technical Spanish SIVE maritime surveillance system and their requirements that integrate AIS[410] systems with radar sensors and cameras.[411] Observers allege that the RMA approach to warfare has been adopted in EU civil military responses and used in border control.[412] The literature asserts that high levels of investment into surveillance research and development via the EU's FP7[413] and Horizon 2020 programmes[414] were linked to an aspiration for sophisticated, RMA levels of surveillance. The case studies in Chapter Four and Five consider evidence for this driver.

The second cultural influence on the procurement of surveillance capability is the European preference for civil military security requirements over military requirements. The recent growth of the civil security market has been observed in academic studies

409. HOBBING, D. P. & KOSLOWSKI, P. R. 2009. The Tools to Support the 'Delivery' of Freedom, Security and Justice: A comparison of border security systems in the EU and the US. Brussels: Directorate General for Internal Policies, Policy Department C: Citizens Rights and Consitutional Affairs.

410. AIS Automatic Identity Sensor

411. MOREL, M. & CLAISSE, S. Integrated System for Interoperable sensors & Information sources for Common abnormal vessel behaviour detection & Collaborative identification of threat (I2C). IEEE Conference publishing, 2010.; ANDERSSON, R. 2012. A Game of Risk, Boat Migration and the Business of Bordering Europe. *Anthropology Today,* 28**,** 7-12.

412. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.; LÉONARD, S. 2009. The creation of FRONTEX and the politics of institutionalisation in the EU external borders policy. *Journal of Contemporary European Research,* 5**,** 371-388.; HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.;

413. Framework Programme 7 (FP7) is the EU Research Programme that ran until 2013 and spent over €1.4bn MAWDSLEY, J. 2013b. A European Agenda for Security Technology: From Innovation Policy to Export Controls. *Flemish Peace Institute, Report.*

414. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.; HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.

and reports,[415] driven by demand for surveillance capacity. In contrast, demand for defence equipment has been static in the West,[416] with defence budgets falling by 8.3% in real terms between 2005 and 2014 according to SIPRI.[417] Now military technology is being rapidly repurposed to meet rising demands for civil security.[418] In its 2013 annual report, Italy's Finmeccanica claimed that rising demand for border security and surveillance has been offsetting losses in traditional military orders.[419] Observers forecast growth in the aerial surveillance market coming from civil security operations generated by the current migrant crisis.[420] For example, the 2015 DSEI conference[421] witnessed an emphasis on 'soft' surveillance for 'sovereignty operations and border security applications' demonstrating capability such as air and ground based radars.[422] One conference observer noted (of Thales and Finmeccanica): 'it is not that they didn't have weapons systems, but you could see the change in focus'.[423] Some see little difference between defence and security, Tim Robinson of Thales has been quoted as seeing: 'a shift in emphasis and an increasing balance between what we see as defence

415. HOIJTINK, M. 2014. Capitalizing on emergence: The 'new' civil security market in Europe. *Security Dialogue,* 45**,** 458-475.; ANDERSON, G. 2014. M&A full-year report 2014. *Jane's Defence Weekly*.

416. ANDERSON, G. 2014. M&A full-year report 2014. *Jane's Defence Weekly*.

417. SIPRI; PROCTOR, K. 2015. Europe's Migrant Crisis: Defense Contractors are poised to win big. *Fortune Magazine*.

418. Ibid.

419. FINMECCANICA 2013. Annual Financial Report, The Future is to Look Beyond. p.66

420. FROST AND SULLIVAN 2010. Increased Threat Perception Drives the European Civil Security Air Surveillance Market. Poland.; PROCTOR, K. 2015. Europe's Migrant Crisis: Defense Contractors are poised to win big. *Fortune Magazine*.

421. Defence Security Equipment International Conference: http://www.dsei.co.uk/page.cfm Accessed February 2016

422. JUDSON, J. 2015. Border Control: Companies Tout Tech for Air, Ground Surveillance. *Defense News*.

423. Ibid. http://www.defensenews.com/story/defense/show-daily/dsei/2015/09/20/border-control-companies-tout-tech-air-ground-surveillance/72400390/ Accessed February 2016

and security. 'Security' is a more politically acceptable way of describing what was traditionally defence'.[424] This evidence suggests that civil security functions and the 'security' industry are currently more acceptable to member states, compared to the 'defence' industry. The case studies that follow will show how discourse surrounding procurement aligns with this civil military preference to gain member state approval for surveillance procurement policies and requirements.

This section considered the technical and industrial imperatives for the procurement of a surveillance capability in the macro context. A member state may support the procurement or tender in order to gain economic benefits and improve national expertise. 'Off-the-shelf' or contractor-driven procurement removes development aspects and technical gains, diminishing member states' involvement and the push for *juste retour*. Research data indicate that the defence and security sectors have significant and growing overlap, particularly in border surveillance requirements. The powerful defence industry is consolidated with fewer players fulfilling sophisticated, military surveillance requirements. In contrast, the civil military market has lower barriers to entry as it fulfils simpler surveillance requirements and there is a proliferation of smaller, weaker firms. Further, the fragmented nature of the security market customer base, and the fragmented supply side, lead to smaller contracts. This reduces the power of civil military sector firms and strengthens the bargaining power of procuring organisations. The calculus for member state support of the security sector is therefore weaker.

424. EURACTIV. 2006. *Critical Infrastructure* [Online]. Available: http://www.euractiv.com/security/critical-infrastructure/article-140597#group_positions [Accessed January 2016].;

The research considered cultural motives where the current emphasis on the civil military industry may reflect the US RMA or a preference for European soft power. While the self-interest of calculus tends to divide interests in collaborative procurement, cultural influences are adhered to by member states across the Western security community. They engender a coherent approach and unity of purpose for surveillance policy and procurement. Interested parties, such as organisation staff and industry, also use cultural references to further policy and procurement for NATO or EU joint border surveillance functions.

Joint procurement of Surveillance

The last aspect of the macro context for joint procurement of aerial surveillance is its 'collaborative' nature. Three aspects of collaborative acquisition have driven procurement in the past: first, the rational necessity for a joint function may drive multilateral procurement of a surveillance capability (this was explored in the first section of this chapter); second, the rational cost benefits of collaboration are considered, given the expense of surveillance assets.[425] Here the research considers if multinational surveillance systems are more cost effective than a series of national systems, and asks if this is a sufficient driver for the collaborative procurement. It explores how the form of transaction, and the extent of development involved affect the collaborative process. Finally, the cultural, multilateral security aspirations of member states are considered.

425. PUGH, P. G. 2007. RETROSPECT AND PROSPECT: TRENDS IN COST AND THEIR IMPLICATIONS FOR UK AEROSPACE. *Defence and Peace Economics,* 18**,** 25-37.

Economic benefits gained from collaboration can motivate collaborative procurement. These include cost benefits from economies of scale, which are affected by the form and extent of the collaborative transaction. Member states usually seek cost savings from collaborative procurement, and this justifies the joint acquisition, however savings are not always achieved.[426] There is a comprehensive body of literature analysing the costs and benefits of collaborative procurement in the aerospace sector, much of it concerned with the efficiency of development and production.[427] Sophisticated surveillance assets are very expensive: for example Global Hawk UAVs cost over $230 million for each aircraft.[428] This level is prohibitive for smaller EU and NATO member state national systems, and inhibiting for those larger states to procure large scale capability. However, where the costs are shared, and there is a multinational surveillance system, such as AWACs or AGS, there is inevitably a saving compared to procurement of a system on a national, standalone basis.[429] Multinational surveillance systems not only reduce costs by sharing the initial investment, but also by centralising manpower and coordinating the gathering of information compared to national systems that duplicate functions. Ambitions for cost savings in European defence and security spending were especially significant in the periods of 2008 - 2015, after the 2008 global finance crisis

426. HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform.

427. Ibid.; BRADDON, D. & HARTLEY, K. 2013. More for less? Exploring the Economic dimensions of multilateral collaboration in military aerospace projects. *Journal of Defense Studies & Resource Management,* 2.2.; DEVORE, M. R. & WEISS, M. 2013. Who's in the cockpit? The political economy of collaborative aircraft decisions. *Review of International Political Economy,* 21**,** 497-533.

428. UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE 2013. Defence Acquisitions, Assessments of Selected Weapons Programs. Washington.

429. DEVORE, M. R. 2011. The Arms Collaboration Dilemma: Between Principal-Agent Dynamics and Collective Action Problems. *Security Studies,* 20**,** 624-662. p.627

increased austerity drives and cuts to defence spending.[430] Defence budgets fell by 8.3% in real terms from 2005-2014 according to SIPRI.[431] Therefore this calculus driver is significant to joint procurement.

The 'form' of collaborative transaction affects the benefits (costs and technical knowledge) received from the procurement. Collaboration may range from a full scale, development programme (for example the Eurofighter Typhoon) to a simple leasing contract (for example the Frontex aerial surveillance contracts) where no acquisition of assets takes place. There is a risk reward relationship linked to the form of transaction where the greater the development aspects and technical skills received from this, the more complex the collaboration negotiations. Simpler transactions ease the difficulties of collaboration and may encourage the process. For example where 'off-the-shelf' equipment is acquired, little or no product development reduces complicated and extended negotiations between member states. In 'fee for service' outsourcing, little investment is required by member states and therefore the transaction becomes easier, as seen in the collaborative SatCom contracts held by the EDA.[432] While transaction form does not drive procurement, it is a crucial feature that can facilitate the procurement and help overcome the myriad of other obstacles. Hartley defines four forms of defence or security procurement on a continuum from national production via collaboration to complete 'off-the-shelf' solutions: National Project (no collaboration and complete

430. BRADDON, D. & HARTLEY, K. 2013. More for less? Exploring the Economic dimensions of multilateral collaboration in military aerospace projects. *Journal of Defense Studies & Resource Management,* 2.2.

431. SIPRI; PROCTOR, K. 2015. Europe's Migrant Crisis: Defense Contractors are poised to win big. *Fortune Magazine*.

432. PARSONS, D. 2012. Companies Seek Profits in Fee-For -Service Surveillance Aircraft. *NDA*.; https://www.eda.europa.eu/what-we-do/activities/activities-search/eu-satcom-market Accessed July 2017

independence of production); International Collaboration (sharing development and production work); Licensed Production (where equipment is produced under a foreign licence, and can also be co-production); and Imported Equipment (purchase of foreign developed and produced equipment).[433] This thesis considers a further, fifth policy option: Outsourcing to a contractor for services. This is collaborative outsourcing and is the lowest risk and most flexible provision of a capability. It changes the commitment required from member states and has been employed extensively for private security services.[434] The table below lists the five policy options together with their cost implications and ease of process for member states.

Type of Contract	**Cost***	**Relative Ease of Process***
National contract	High	Easy
International Collaboration	Medium	Difficult
Multilateral Production under licence	Medium	Medium
Import	Medium	Medium
Outsource to Contractor	Low	Easy

*Cost and Relative Ease of Process added by Author

Figure 4. Table adapted from of Hartley's typology of defence procurement[435]

433. HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform.

434. CUSUMANO, E. & KINSEY, C. 2014. Bureaucratic Interests and the Outsourcing of Security: The Privatization of Diplomatic Protection in the United States and the United Kingdom. *Armed Forces & Society*.

[435] HARTLEY, K. 2012. White Elephants: The Political Economy of Multinational Defence Projects. Brussels: The Foundation for European Economic Reform.

Hartley's contract typology has different cost and process implications for member states. The case studies in this research consider 'International Collaboration', 'Import' and 'Outsource to a contractor' solutions. An example of a multilateral import transaction was NATO's AWACs procurement, which attracted participation via offsets. Although here, as in NATO's C17 procurement, the member states retain ownership of the assets.[436] Additional cost benefits are gained in import deals where offset deals are negotiated. Outsourcing to a contractor for the capability requires low levels of investment. There are few examples of collaborative contracting for contractor services, but successful contracts include the EDA's EU SatCom project, where Airbus Defence and Space provide services under a Framework Contract.[437] This solution is the lowest cost and risk but has the lowest levels of member state industry benefits, but an urgently needed capability is acquired easily and quickly. This may be compared to the complex and lengthy processes of international collaboration.

Where there are complex negotiations and cost benefits are not totally realised, additional motivations may explain the joint nature of the collaborative procurement. This research is concerned with the 'multilateral' effects of EU and NATO organisations on the procurement process. This involves member state attitude to multilateralism and the levels of multilateralism associated with the organisation. Thus, the terms

436. WOLF JR, C., CARTER, G. A., CASTRO, R. P., DREYFUSS, D. & MCCALL, J. 1976. 'Offsets' for NATO Procurement of the Airborne Warning and Control System: Opportunities and Implications. DTIC Document.;

http://www.nspa.nato.int/en/organization/NAMP/sac.htm Accessed July 2017

437.https://www.eda.europa.eu/info-hub/press-centre/latest-news/2016/06/20/eda-and-csdp-civilian-missions-develop-cooperation Accessed July 2017

'multilateral' and 'collaborative' need to be distinguished. 'Multilateral' describes the nature of the organisation procuring the capability, and reflects functional and political aspects that affect and drive the procurement process. This study adopts Caporaso's institutional definition of 'multilateral' as 'collective beliefs, presumptive habits and shared values'.[438] It represents the cultural aspect of 'joint'. 'Collaborative' describes the multinational procurement contract and represents the calculus 'joint' aspect.

The 'multilateral' aspects that drive procurement include political expediency for member states to participate in the collaborative procurement as part of an alliance. Member states may gain political capital by participating in a multilateral procurement. Cooperation over procurement of a security capability demonstrates cohesion and a common outlook on security policy. Shared meanings play a part, as identified in Joana and Smith's study on the procurement of the A400M, where the symbolism of political cooperation was key in the 'joint' procurement policy.[439] Thus, multilateral, cultural drivers can drive requirement for the capability. For example, NATO's AWACs acquisition did not just fulfil the necessary joint role of airborne early warning, but also represented a joint security response by a political alliance.[440] In a similar way, NATO's AGS programme and the EU's Eurosur initiative represent multilateral, joint security responses to security threats. It can make strategic sense for countries to support

438. CAPORASO, J. A. 1992. International relations theory and multilateralism: the search for foundations. *International Organization,* 46**,** 599-632.

439. JOANA, J. & SMITH, A. 2006. Changing french military procurement policy: The state, industry and 'Europe' in the case of the A400M. *West European Politics,* 29**,** 70-89.

440. TESSMER, A. L. 1988. *Politics of Compromise: NATO and AWACs,* Washington DC, National Defense University Press.

multilateral programmes in order to enlist the approval of the dominant member states, such as the US within NATO.[441]

This section outlined the factors driving the 'joint' nature of multilateral procurement. There are both calculus and cultural aspects that drive member states to agree to share the performance of security functions. Calculus drivers, such as the aspiration for cost savings and benefits, may encourage member states to look to their self-interest and therefore to diverge from joint action. Previous studies have shown that individual member state interests may interrupt negotiations and prevent delivery of those benefits. Cultural aspects of 'joint' - the solidarity and multilateral drivers of a political alliance - are cohesive in collaborative procurement.

Conclusion

This chapter described the macro environment within which decisions for the collaborative procurement of surveillance capabilities is made. It argued that although previous studies have focussed on calculus drivers for collaborative procurement, cultural, ideational aspects of multilateral acquisition often encourage political support for joint action. The chapter considered calculus and cultural explanations for the security mission of transnational border surveillance, member state attitude towards and support of the industrial base that provides surveillance solutions, the 'joint' nature of collaborative procurement. It explored member states' strategic drivers for a surveillance capability to support counter measures against threats such as illegal

441. NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School.

migration and cross border crime. Previous studies and other data indicated that member states have differing security outlooks and that rational demand for transnational border surveillance is not a sufficient explanation for procurement for all Western member states.

However, evidence concerning West's coherent 'community of values' suggested that this cultural driver could encourage multilateral border surveillance policy. The chapter also noted the recent growth in the civil security industry and linked this to the European culture of acceptable 'softer' security solutions. It linked this with positive attitudes towards the procurement of surveillance as opposed to 'harder' kinetic capabilities.

Previous studies also suggested that *juste retour* principle and the US RMA could generate industrial and technical imperatives for procurement of surveillance capabilities. However, the chapter considered different surveillance solutions and observed that different solutions generated varying levels of these imperatives. Thus the procurement of an 'off-the-shelf' or an outsourced 'fee for service' surveillance capability is unlikely to generate high levels of technical and industrial imperatives.

The chapter also examined cost efficiency drivers for 'joint' procurement and considered examples of multilateral and collaborative acquisition such as NATO's AWACs, Eurofighter Typhoon and the A400M. Here previous studies proved that cost savings are not always achieved in collaborative procurement. Additional logics were therefore required for joint acquisition such as political benefits and cultural factors related to multilateralism.

The next chapter considers the micro organisational context for the procurement of a surveillance capability. Here drivers for procurement include organisational role expansion. The chapter also considers how bureaucratic structure and culture influences and facilitates the procurement processes and effect delivery of the different drivers from the macro environment. While this chapter has considered drivers for the procurement from the perspective of member states, the next chapter examines how organisation and industry influences enter the procurement process.

Chapter 3: The politics and process of collaborative procurement in NATO and the EU bureaucracies

Introduction

Keohane said that organisations 'do not merely reflect the preferences and powers of the units constituting them; the institutions themselves shape those preferences and power'.[442] This chapter considers the micro, organisation context of NATO and EU Commission (the 'Commission') bureaucracies, for explanations of multilateral procurement of surveillance capability. It considers if and how these organisations shape preferences for policy and procurement. There are two significant aspects for the research in this context. First, examination of this environment is important to find evidence of organisation role expansion driving procurement. Second, it opens the black box of NATO and the Commission to reveal how decision-making processes, bureaucratic structure and organisation culture facilitate and deliver procurement drivers: strategic rationale, symbolic culture, technical imperatives, industrial imperatives, and role expansion. Organisation bureaucracy affects member state debate and industrial actor influence; organisations are influenced by external scrutiny and internal culture. Here, the research builds on Scott's ideas of 'open organisations' to link

442. KEOHANE, R. O. 1988. International Institutions: Two Approaches. *International Studies Quarterly,* 32**,** 379-396.

the macro and micro contexts.[443] It finds that NATO and EU bureaucracies shape and influence the drivers for procurement via their objectives for role expansion, and their influence over the delivery of other drivers.

NATO and the EU offer differing models of security provision with varied cultures, functions, instruments and underlying institutional logics.[444] However both have expanded their non-kinetic, civil military functions, such as border surveillance. Procurement of security assets and capability may support these broadened activities. The first part of the chapter considers recent functional expansion by the two organisations, identifying the strategies, intentions, and incentives for any expansion that may drive procurement activity.

First, documents relating to security strategy, maritime security policy and procurement policy are considered as evidence of NATO and EU intentions. Here the organisations align themselves with member states' rational and cultural expectations for the provision of security, to justify their roles and to legitimise any role expansion. Second, the chapter presents evidence of NATO and EU role expansion. Current security functions include coordination of military and civil military missions, defence and security research, cyber security and procurement. These roles have led to procurement of satellite and surveillance capabilities by both organisations. NATO is a regional military alliance with a mandate for collective defence; its civil military roles are limited

443. SCOTT, R. W. 1992. Organizations: Rational, natural, and open systems. *Aufl., Englewood Cliffs (NJ)*.

444. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

but evolving.[445] The EU's security expertise is generally accepted as civil security[446] (such as border control and policing) and is performed via the Commission's DG Migration and Home Affairs (DG MHA) whose security role is also expanding. The chapter refers to military missions coordinated by the EDA, but the thesis focus on civil military missions leads to a closer examination of the Commission's bureaucracy. Third, collaborative procurement is viewed as a security role for both NATO and the EU.[447] However, critics note the low levels of joint acquisition via these organisations.[448] The chapter describes these three aspects with reference to potential rivalry between NATO and the EU. Here, where there is overlap regarding security or procurement roles, competition provides an incentive for role expansion and the related procurement of assets and capability.[449]

The second part of the chapter considers the effects of NATO and EU bureaucracies upon drivers for procurement. Bureaucratic aspects such as forums and conferences,

445. Ibid.

446. ZYLA, B. Ibid.Overlap or Opposition? EU and NATO's Strategic (Sub-)Culture. 667-687.

447. VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform.; GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.

448. GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.; GATES, R. M. 2010. *RE: The Future of NATO.*;VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform.; GIEGERICH, B. 2010. Budget Crunch: Implications for European Defence. *Survival,* 52**,** 87-98.

449. LORD JOPLING 2010. 207 CDS 10 E BIS - MARITIME SECURITY: NATO AND EU ROLES AND CO-ORDINATION. Brussels: NATO Parliamentary Assembly,.; GEBHARD, C. & SMITH, S. J. 2015. The two faces of EU–NATO cooperation: Counter-piracy operations off the Somali coast. *Cooperation and Conflict,* 50**,** 107-127.; SMITH, S. J. 2011b. EU–NATO cooperation: a case of institutional fatigue? *European Security,* 20**,** 243-264.; KAMP, K.-H. 2013. *NATO-EU Cooperation-Forget it!* [Online]. Carnegie Europe. Available: http://carnegieeurope.eu/strategiceurope/53458 [Accessed August 2017].

funding structures and levels of scrutiny enable different calculus and cultural drivers to enter the procurement process. Little is written on the bureaucratic nature of NATO and comparisons between the security-oriented bureaucracies of EU and NATO are rare.[450] This study builds upon the few works that consider the inner workings of security bureaucracies.[451] Realists contend that multilateral organisations are created by member states to serve their interests, to reduce transaction costs, to gain efficiencies via centralisation, or to legitimise their objectives pursued through an independent organisation.[452] Here member states decide procurement policy, set parameters for contract negotiations, and intergovernmental politics generate tension in the procurement process. In contrast, institutionalists assert that organisations have influence and power over activities such as formation of security policy and the related procurement, through control of process and information.[453] This is truer for the Commission than NATO, which has 'far less institutional latitude', compared to Commission counterparts.[454] The study finds that member state strategic and industrial

450. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

451. ALLISON, G. T. & MORRIS, F. A. 1975. Armaments and Arms Control: Exploring the Determinants of Military Weapons. *Daedalus,* 104**,** 99-129.; MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.; MAYER, S. (ed.) 2014b. *NATO's Post Cold War Politics - the Changing Provision of Security,* Hampshire: Palgrave Macmillan.;

452. KEOHANE, R. O. 1988. International Institutions: Two Approaches. *International Studies Quarterly,* 32**,** 379-396. p.386; ABBOTT, K. W. & SNIDAL, D. 1998. Why States Act through Formal International Organizations. *Journal of Conflict Resolution,* 42**,** 3-32.

453. BARNETT, M. N. & FINNEMORE, M. 1999. The politics, power, and pathologies of international organizations. *International organization,* 53**,** 699-732.

454. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

imperatives are delivered via NATO's 'intergovernmental'[455] bureaucracy. In contrast, the Commission's 'supranational'[456] bureaucracy enables organisation role expansion imperatives to encourage procurement processes.

Next, organisation culture is considered.[457] Organisation culture is generated by the structure of organisations, as well as the character and behaviour of the staff within it.[458] It is a 'persistent patterned way of thinking about the central tasks of, and human relationships within, an organisation. Importantly, it provides 'shared interpretations of the world and shapes the way officials communicate with one another and how they perform the tasks entrusted to them.'[459] Where there is a strong organisation culture, such as in the Commission, decision-making is more efficient. Where the culture is weak, as in NATO, diverging objectives and behaviour may distract decision-making, leading to inefficient procurement processes. Moreover, where it is aligned with the relevant security cultures then the decision-making processes are also easier. Finally, the chapter describes generic, multilateral procurement practices. Here bureaucratic

455. Intergovernmental structures are where staff act in accordance to formal member state mandates; operate as a Trojan horse on behalf of a member state in an organisation; where staff member behaviour is guided by a loyalty to their member state MARCUSSEN, M., TRONDAL, J., VEGGELAND, F. & LARSSON, T. 2010. *Unpacking International Organisations: The dynamics of compound bureaucracies,* Manchester, Manchester University Press. p.13

456. Supranational structures are where staff feel loyalty and allegiance to an organisation over and above their national allegiance ibid. p.13

457. It must be noted that organisation culture as a concept is separate to 'strategic culture' referred to as a driver for the procurement in the previous chapter.

458. WILSON, J. Q. 1989. *Bureaucracy: What government agencies do and why they do it*, Basic Books. p.91

459. CINI, M. 1996. *The European Commission: leadership, organisation, and culture in the EU administration*, Manchester University Press.

politics theory aids explanations of decision-making by member state representatives, organisation staff and industry personnel.

NATO and EU Role Expansion

The security roles of NATO and the Commission have expanded and adjusted as member state security requirements have changed, and as organisational interests for broader security functions have been realised. As noted in the introduction, three aspects of organisation role expansion are considered in this section: NATO and EU security and procurement policies; NATO and EU role expansion into the security space; and NATO and EU procurement roles. The potential for organisation rivalry is considered for all of these aspects as incentives and a driver for procurement.

NATO and EU Policy leading to Expanded Security and Procurement Roles?

Both NATO and the EU developed and adjusted their security roles in the aftermath of the Cold War. This was reflected in their public policy documents. The references to recent NATO and EU strategic concepts, maritime strategy papers and procurement policies below, demonstrate how both organisations aligned themselves with member state security concerns and moved into the civil military security sphere where surveillance is an important capability. They indicate organisation intentions regarding security roles, particularly where authored by organisation staff. They also provide evidence of any ambition overlap that could generate rivalry and drive procurement activities.

Strategic concepts are intrinsically linked to NATO's Post Cold War role, the first one was written in 1991.[460] After the Cold War NATO needed to adjust its policy and related role to the requirements of the current security context and member state requirements. There was a concern for NATO's continued relevance and some European governments worried that the US commitment to European security might be weakened.[461] The 1991 'New Strategic Concept' sought to address these concerns and realign NATO's tasks to the new security context.[462] Further realignment followed in NATO's 1999 Strategic Concept, which referred to the Western European Union (WEU) joint defence effort, the Petersburg Tasks,[463] and the potential for expeditionary forces via crisis management in the Balkans.[464] NATO's most recent, 2010 Strategic Concept, adjusts its role still further.[465] It aligns with member state concerns and stresses contemporary threats of terrorism, cross border crime and illegal trafficking. It proposes that these could be addressed by using an array of instruments including non-military responses and civil military measures.[466] The Military Committee, a member state

460. NATO. 1991. *The Alliance's New Strategic Concept* [Online]. Brussels. Available: http://www.nato.int/cps/en/natohq/official_texts_23847.htm [Accessed April 2017].

461. MEARSHEIMER, J. J. 1990. Back to the Future: Instability in Europe after the Cold War. *International Security,* 15**,** 5-56.

462. NATO. 1991. *The Alliance's New Strategic Concept* [Online]. Brussels. Available: http://www.nato.int/cps/en/natohq/official_texts_23847.htm [Accessed April 2017].

463. These included humanitarian and rescue tasks; conflict prevention and peace keeping; peace making; and post conflict stabilisation. https://eur-lex.europa.eu/summary/glossary/petersberg_tasks.html Accessed October 2018

464. NATO 1999a. The Alliance's Strategic Concept. Washington D.C.

465. NATO 2010b. Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization. Lisbon: NATO.

466. Ibid.

body, had led on previous drafting of Strategic Concepts.[467] However, the 2010 Strategic Concept was written by Secretary General, Anders Fogh Rasmussen, and therefore represents an expression of IS objectives.[468] The language contrasts with primarily military solutions in previous Strategic Concepts.[469] Here NATO places itself in the Western cultural community, stating that 'the Alliance remains an unparalleled community of freedom, peace, security and shared values'.[470]

The EU developed its security policy in the Maastricht Treaty[471] as a logical step from its economic and foreign policy. There are two strands of security policy. In 1992, The Commission created its civil security role via the 'Third Pillar'[472] cooperation in via the Justice and Home Affairs (JHA), and evolved its military role via the Common Security and Defence Policy (CSDP). The CSDP incorporated previous security policies of the Western European Union (WEU)[473] that included the Petersburg Declaration.[474] The Petersburg tasks defined the military action that the EU could undertake in crisis

467. HENDRICKSON, R. C. 2014. The Changing Role of NATO's Secretary General. *In:* MAYER, S. (ed.) *NATO's Post Cold War Politics, The Changing Provision of Security.* Basingston: Palgrave Macmillan.

468. Ibid.

469. NATO 1999a. The Alliance's Strategic Concept. Washington D.C.; NATO. 1991. *The Alliance's New Strategic Concept* [Online]. Brussels. Available: http://www.nato.int/cps/en/natohq/official_texts_23847.htm [Accessed April 2017].

470. NATO 2010b. Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organization. Lisbon: NATO. para 49

471. EU COUNCIL & EU COMMISSION 1992. Treaty On European Union. Luxembourg.

472. Ibid.

473. The WEU was a defensive alliance of ten member states (Belgium, France, Italy, Germany, Greece, Luxembourg, the Netherlands, Portugal, Spain and the UK) formed in 1948 and closed down in 2011, https://eeas.europa.eu/topics/common-security-and-defence-policy-csdp/5388/shaping-of-a-common-security-and-defence-policy-_en Accessed September 2018

474. WESTERN EUROPEAN UNION 1992. Petersberg Declaration. Bonn.

operations. It denoted that military units could be deployed for humanitarian and rescue tasks; peacekeeping tasks; and could provide combat forces in crisis management.[475] Thus the EU moved into the civil military sphere. This historically gave cause for potential functional overlap and rivalry with NATO. The CSDP oversaw the European Security Strategy (ESS) document, adopted in 2003 and updated in 2008.[476] This called for combined military and civilian responses. The Political and Security Committee (PSC) drafted the ESS. It is the highest-ranking intergovernmental body of the CSDP[477] and represents member state interests. The document makes reference to human and humanitarian rights alongside European values of peace, order and good governance, thus articulating the Western 'community of values'.

In 2005, the Council adopted a 'Strategy for External Dimension of JHA',[478] which also identifies threats such as terrorism, organised crime, migration and state failure. The document largely refers to security solutions external to the EU, but includes cooperation of the Commission's agencies, 'Europol, Eurojust, The European Police College, and the Borders Agency'.[479] Finally, the EU's Internal Security Strategy (ISS) of 2010 identifies similar threats and solutions.[480] These papers, written by the

475. Ibid. Article II.4 p.6

476. EU 2003. A Secure Europe in a Better World, European Security Strategy. Brussels.; EU 2008. Report on the Implementation of the European Security Strategy - Providing Security in a Changing World.

477. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

478. EUROPEAN COMMISSION 2005. A STRATEGY ON THE EXTERNAL DIMENSION OF THE AREA OF FREEDOM, SECURITY AND JUSTICE. Brussels.

479. Ibid. VI (6)

480. EU COUNCIL 2010. Internal Security Strategy for the European Union: 'Towards a European Security Model'. Brussels: Council of the European Union. p.8

Commission, demonstrate organisation preferences and aim to reflect member state security requirements.

Thus NATO and EU Security Strategy documents identify similar threats and civil military solutions, aligning with the civil military and Western 'community of values' culture. Both organisation staff and member state representatives express these intentions in policy papers reflecting a consensus in expanded civil military security roles such as disaster relief or border control, both of which use surveillance capability. NATO and EU do not overtly identify with each other's roles apart from the emphasis on a similar rules based, cooperative approach to security. Given the 21 member states that are members of both organisations there is a potential overlap in mandate that could generate rivalry.

Maritime security strategies are based on a practical security approach and overtly acknowledge NATO and EU functional overlaps. These strategies are particularly relevant to this research as they are often associated with transnational surveillance functions. NATO's 2011 Alliance Maritime strategy[481] stresses the importance of a civil security approach alongside a military approach, and the need for coordination with the UN and the EU. An additional report from NATO Parliamentary Assembly notes:

> NATO and EU are progressively moving closer in the type of tasks and activities that they seek to undertake. With EUNAVFOR, the EU has demonstrated its ability to conduct a maritime operation far away from its borders. Meanwhile

481. NATO 2011. Alliance Maritime Strategy. Brussels.

> NATO is considering a more active role in law enforcement maritime security operations, as well as maritime security sector reform and capacity building[482]

This acknowledges potential rivalry. The Commission first published an Integrated Maritime Policy in 2007,[483] but this focused on the economic benefits of a maritime strategy. The 2014 'European Union Maritime Security Strategy'[484] focussed on security aspects, and stressed that civilian and military measures should be used in an integrated, rules based approach. It was co-authored by the Council, the European External Action Service (EEAS) and the Commission.[485] It emphasised the EU's role in providing such security, as well as the importance of coordination with other bodies such as NATO. These documents exhibit an awareness of agency overlap that could generate competition and incentive for role expansion.

Analysis of NATO and EU procurement policy also provides data regarding role assertion. Neither NATO nor the EU are specialist procurement agencies. Both have political and strategic purposes that predate and transcend procurement activities, and thus procurement often supports these other aims.[486] However, the collaborative procurement roles of NATO and EU are strategically important to member states, and

482. LORD JOPLING 2010. 207 CDS 10 E BIS - MARITIME SECURITY: NATO AND EU ROLES AND CO-ORDINATION. Brussels: NATO Parliamentary Assembly,. Para V.(96)

483. EU COMMISSION 2007b. An Integrated Maritime Policy for the European Union COM(2007) 575 final. Brussels.

484. COUNCIL OF THE EUROPEAN UNION 2014. European Union Maritime Security Strategy. Brussels.

485. DRENT, M. E., LANDMAN, L. & ZANDEE, D. H. 2014. *The EU as a Security Provider*, Clingendael, Netherlands Institute of International Relations.

486. LOUTH, J. 2012. Smart Defence and the Critical Flow of Information. *In:* ARONSSON, L. & LOUTH, J. (eds.) *Reflections on Industry's Contributions to Smart Defence.* London: RUSI. p.9; TESSMER, A. L. 1988. *Politics of Compromise: NATO and AWACs,* Washington DC, National Defense University Press.; Personal Interview with Otfried Wohlleben

contribute to a contemporary rationale for the organisations. Therefore expansion of this function is in the organisations' interests and may incentivise procurement of surveillance capabilities. NATO and EU procurement policies have been driven, in part, by failure of European member states to invest in security and defence assets since the end of the Cold War.[487] In contrast the US has invested huge sums in security and defence. In 2013, European defence spending was 60% of the US, and the US provided 70% of NATO's ISR assets.[488] European member state capability gaps include strategic lift assets, precision strike munitions and C4ISR capability.[489] NATO and EU procurement policies overtly seek to address these gaps to address security objectives but also political objectives.[490]

Historically, NATO procurement policies have proved unpopular with member states. The Defence Capabilities Initiative (DCI),[491] evolved after the Bosnian campaign,[492] proved too wide-ranging, and was criticised by member states for being a 'shopping

487. GOURE, D. 2014. NATO's Last Chance, Invest Its Scarce Resources Wisely or Accept Strategic Irrelevance. Lexington Institute.

488. Ibid.

489. YOST, D. S. 2000. The NATO Capabilities Gap and the European Union. *Survival,* 42**,** 97-128.

490. HEISBOURG, F., ISCHINGER, W., ROBERTSON, G. & SCHAKE, K. N. 2012. *All Alone?: What US Retrenchment Means for Europe and NATO*, Centre for European Reform.

491. NATO. 2000a. *Press Release: Acquisition policies dominate CNAD meeting; 24 Oct. 2000* [Online]. Brussels. Available: http://www.nato.int/cps/en/natohq/news_17973.htm?selectedLocale=en [Accessed November 2016], NATO. 2000b. *Press Release: Armaments meeting; 13 Apr. 2000* [Online]. Brussels. Available: http://www.nato.int/cps/en/natohq/news_17814.htm?selectedLocale=en [Accessed November 2016].

492. FORCIERI, G. 2000. INTERIM REPORT: THE DEFENCE CAPABILITIES INITIATIVE AND NATO'S STRATEGIC CONCEPT. Brussels: NATO Parliamentary Assembly.

list'.[493] It required increased defence spending and generated little action.[494] In 2002, NATO launched the Prague Capabilities Commitment (PCC). It extracted specific procurement undertakings from member states, and required them to report on the implementation of these undertakings.[495] However, the PCC also did not generate much procurement, especially after the 2008 financial crisis. Therefore in 2011, NATO adopted a renewed procurement policy: Smart Defence.[496] It is associated with capabilities such as surveillance, strategic airlift and refuelling.[497] Smart Defence focuses on procurement via multinational 'coalitions of the willing' (rather than 'common funding' which involves all member states) and aims to make procurement ambitions more achievable.[498] However it has been charged with being an ineffectual policy.[499]

EU procurement policy in the defence and security sector is recent given its new role in these areas. The Ghent Initiative[500] was established in 2010 and is an inventory of capabilities to be pooled. These include functions such as maritime surveillance

493. NAUMANN, G. K. 2003. A Heterogenous Architecture for Alliance Ground Surveillance. *Nato's Nations and Partners for Peace,* 1.

494. EK, C. 2007. NATO's Prague Capabilities Commitment. Washington DC: CRS Report for Congress.

495. BUCKLEY, D. E. 2002. Prague Capabilities Commitment Explained. NATO Headquarters.

496. FOGH RASMUSSEN, A. 2011. *RE: Building Security in an age of austerity.*

497. MAULNY, J.-P. 2012. The Franco-British Treaty, The European Union's 'Pooling and sharing' and NATO's 'Smart Defence'; How can the different initiatives in terms of pooling capabilities be coordinated. Paris: IRIS. p.3; HENIUS, J. & MCDONALD, J. L. 2012. *Smart Defense: A Critical Appraisal*, NATO defense College, Research division= Collège de défense de l'Otan, Division recherche.

498. NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School. p.3; Personal Interview with Erling Wang

499. Ibid.

500. DEIMLING, C. V., EKSTROM, T. & GLAS, A. H. 2013. Cooperative Purchasing in Defence: Analysis of NATO and EU initiatives. *IPSERA 2013 Conference.*

networking (MARSUR), European Satellite Procurement Cell (ESCP), air-to-air refuelling and intelligence surveillance reconnaissance.[501] However, there has been a slow member state response to this.[502] Low value procurement policy is controlled via general legislation at Commission and Agency level and security research programmes such as Horizon 2020.[503] The procurement policies show an intention for greater role expansion than actually fulfilled. This is explored below.

The strategy papers above showed NATO and EU alignment with member state rational and cultural requirements for additional efficient, civil military solutions and procurement. They express organisation intention for an expanded security role. Here, NATO is adjusting to civil military requirements of the post-Cold War and 9/11 security context, and the Commission is establishing a new security role within its Schengen remit. The following section considers the implementation of these policies for evidence of role expansion, assessing if these policies expand procurement activity.

Security Roles

This section considers the evolution and expansion of NATO and EU security and defence activities that could justify and lead to collaborative procurement. During the Cold War, NATO security missions were limited to air surveillance and policing,

501. MAULNY, J.-P. 2012. The Franco-British Treaty, The European Union's 'Pooling and sharing' and NATO's 'Smart Defence'; How can the different initiatives in terms of pooling capabilities be coordinated. Paris: IRIS. p.2

502. MÖLLING, C. Pooling and Sharing in the EU and NATO. German Defence Politics, 2013. Nomos Verlagsgesellschaft mbH & Co. KG, 359-372.

503. EU COMMISSION 2013c. REGULATION (EU) No 1291/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) and repealing Decision No 1982/2006/EC. Brussels: Official Journal of the European Union.

maritime deterrence and patrols, as well as diplomacy and exercises.[504] From 1990, NATO's role has evolved to suit the post-Cold War and 9/11 security environment to ensure the organisation's survival. The post-Cold War security context and subsequent expansion of NATO to new member states enhanced the sense and ability for multilateral efforts.[505] Thus NATO evolved its security roles, engaging in expeditionary combat missions, starting in the Balkans in 1995, and followed by operations in Afghanistan, Iraq and Libya.[506] It also developed civil security initiatives of humanitarian assistance, peacekeeping and police training.[507] NATO's aerial surveillance capability was initially a military function via its air to air AWACs capability, and more recently via its air to ground role, provided by US national contributions, as in the Kosovo conflict and the Libyan intervention in 2011.[508] The function of aerial surveillance is also performed in an expanded maritime, civil military context,[509] as discussed at NATO's 2010 Parliamentary Assembly:

> .... during the Cold War, NATO's contribution to maritime security was understood mainly in the context of collective defence, the changing security environment has led the Alliance to take on a broader array of tasks in the maritime domain, ranging from confidence -building and partnership to higher-

504. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

505. SCHIMMELFENNIG, F. 2003. *The EU, NATO and the Integration of Europe*, Cambridge University Press.

506. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

507. YOST, D. S. 2014. *NATO's Balancing Act,* Washington DC, United States Institute of Peace.

508. HALLAMS, E. & SCHREER, B. 2012. Towards a 'post-American' alliance? NATO burden-sharing after Libya. *International Affairs,* 88**,** 313-327.

509. LORD JOPLING 2010. 207 CDS 10 E BIS - MARITIME SECURITY: NATO AND EU ROLES AND CO-ORDINATION. Brussels: NATO Parliamentary Assembly,. Para 9-12

> end maritime interdiction, counterterrorism and counter-piracy operations. For this, NATO can rely on a number of existing assets and structures.[510]

This excerpt refers to 'existing assets and structures' linking the new civil roles with the equipment needed. While sophisticated, military assets are an expensive way of providing a civil security solution. The dual use aspect is an argument used with European member states when advocating procurement of surveillance capabilities.[511]

The EU is establishing its role in civil military operations and other roles, such as research into security solutions and procurement of security capabilities. Although it has performed limited military missions, the EU is considered to be a civil security power.[512] Member states, such as the UK, restrain the EU from developing military capability, preferring military focus to remain with NATO.[513] The 1999 Helsinki Council conclusions reflect an awareness of this, explicitly denying the creation of a European Army.[514] However, the organisation has pressed ahead with developing security capabilities and studies have found evidence of proactive security role expansion.[515]

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510. Ibid. Para 23

511. Phone Interview with Matt Copija

512. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

513. WATERFIELD, B. 2012. *Britain blocks EU plans for 'operational military headquarters'* [Online]. Available: http://www.telegraph.co.uk/news/worldnews/europe/eu/8645749/Britain-blocks-EU-plans-for-operational-military-headquarters.html [Accessed April 2018].

514. EUROPEAN COUNCIL 1999. Helsinki European Council 10 and 11 December 1999, Presidency Conclusions. Brussels. II para 27

515. MAWDSLEY, J. 2013b. A European Agenda for Security Technology: From Innovation Policy to Export Controls. *Flemish Peace Institute, Report.* p.16; EDLER, J. & JAMES, A. D. 2012. Understanding the emergence of STI policies in the EU: The genesis of EU security research and the role of the EU commission as policy entrepreneur. Manchester Business School Working Paper.; KLEIN, N. 2010.

EU security objectives were formalised with the creation of the Common Foreign and Security Policy (CFSP) in 1993 and the CDSP in the Lisbon Treaty in 2009.[516] The first EU military missions were launched in 2003.[517] Since then there have been 20 missions, including those to Kosovo and Afghanistan. Operation Atalanta,[518] the EU's anti piracy mission off the coast of Somalia, fulfils surveillance functions and here again studies have found evidence of proactive role expansion.[519] Other EU civil military surveillance operations include Operation MARSUR,[520] surveillance of the Mediterranean coordinated by the EDA, and recently Operation Sophia,[521] which aims to disrupt Central and Southern Mediterranean migration and smuggling routes. Thus

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European Agents Out of Control?: Delegation and Agency in the Civil-military Crisis Management of the European Union 1999-2008.

516. 2007. Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007 Lisbon.

517. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

518. http://eunavfor.eu/mission/ Accessed August 2017

519. KAUNERT, C. & ZWOLSKI, K. 2014. Somalia versus Captain 'Hook': assessing the EU's security actorness in countering piracy off the Horn of Africa. *Cambridge Review of International Affairs,* 27**,** 593-612.; GERMOND, B. 2013. The European Union at the Horn of Africa: The Contribution of Critical Geopolitics to Piracy Studies. *Global Policy,* 4**,** 80-85.; MAYER, S. (ed.) 2014b. *NATO's Post Cold War Politics - the Changing Provision of Security,* Hampshire: Palgrave Macmillan.

520. EUROPEAN DEFENCE AGENCY. 2012. *Maritime Surveillance (MARSUR)* [Online]. Brussels. Available: https://www.eda.europa.eu/docs/eda-factsheets/marsur-factsheet-v2_09102012_cs5_bleu [Accessed August 2017].;

521. EUNAVFOR MED 2017. EUNAVFOR MED Operation Sophia Mission. Rome.; https://eeas.europa.eu/sites/eeas/files/eunavfor_med_-_mission_21_august_2017_en.pdf Accessed August 2017

recent missions show expanded surveillance activities, driven by member state security requirements and EU role expansion efforts.[522]

The EU Commission's JHA mandate was formalised in 1999 when the DG JHA was established. Its operational focus has been on civil security functions such as migration management and counter-terrorism.[523] These often straddle military and civil security capabilities, where operations enlist civil security forces of police alongside military capability. For example Frontex's Operation Triton,[524] which monitored the Italian coast for distressed vehicles, involved national military and civilian agencies. Other civil military security roles are fulfilled by EU agencies such as the Satellite Centre,[525] which provides security surveillance services to Frontex, the EEAS, and EU Missions under the CDSP. Further EU Research projects under FP7 and Horizon 2020, such as Operation CloseEye,[526] can be seen as proto operations, where the related procurement sets a precedent of EU security competence. These provide opportunities for organisation procurement.

522. GERMOND, B. 2013. The European Union at the Horn of Africa: The Contribution of Critical Geopolitics to Piracy Studies. *Global Policy,* 4**,** 80-85.

523. NEAL, A. W. 2009. Securitization and Risk at the EU Border: The Origins of FRONTEX*. *JCMS: Journal of Common Market Studies,* 47**,** 333-356.; KAUNERT, C. & LÉONARD, S. 2010. After the Stockholm programme: an area of freedom, security and justice in the European Union? *European Security,* 19**,** 143-149.; KAUNERT, C. & GIOVANNA, M. D. Ibid.Post-9/11 EU counter-terrorist financing cooperation: differentiating supranational policy entrepreneurship by the Commission and the Council Secretariat. 275-295.

524. http://frontex.europa.eu/pressroom/hot-topics/joint-operation-triton-italy--ekKaes Accessed August 2017

525. https://www.satcen.europa.eu/who-we-are/our-mission Accessed August 2017

526. http://www.closeye.eu Accessed August 2017;

There is a small body of literature that considers NATO and EU cooperation, provides evidence of functional overlap, the potential for organisation rivalry, and incentives for role assertion and related procurement.[527] Instances of EU and NATO running parallel operations give opportunities for competitive dynamics to arise, for example anti piracy operations off the Coast of Somalia in 2008.[528] Here, member states chose to operate with either Operation Atalanta (under EU Command), or via NATO's Operation Ocean Shield[529] (under national command). Evidence of organisation competition was found in this scenario, particularly at political levels.[530] However studies find no evidence of competition regarding examples of practical co-operation between the EU and NATO, one noting that 'the outcome is neither cooperation or competition but dysfunction'.[531] Structures and procedures are in place but they rarely translate into action due to the

527. KEOHANE, D. 2006. *Unblocking EU-NATO Co-operation* [Online]. London: Centre for European Reform. Available: http://www.cer.eu/publications/archive/bulletin-article/2006/unblocking-eu-nato-co-operation [Accessed August 2017].; KAMP, K.-H. 2013. *NATO-EU Cooperation-Forget it!* [Online]. Carnegie Europe. Available: http://carnegieeurope.eu/strategiceurope/53458 [Accessed August 2017].; SMITH, S. J. 2011b. EU–NATO cooperation: a case of institutional fatigue? *European Security,* 20**,** 243-264.; GEBHARD, C. & SMITH, S. J. 2015. The two faces of EU–NATO cooperation: Counter-piracy operations off the Somali coast. *Cooperation and Conflict,* 50**,** 107-127.; CORNISH, D. P. 2006. EU and NATO: Cooperation Or Competition. Brussels: European Parliament Sub Committee on Security and Defence.; FIOTT, D. 2017. The EU, NATO and the European defence market: do institutional responses to defence globalisation matter? *European Security,* 26**,** 398-414.

528. GEBHARD, C. & SMITH, S. J. 2015. The two faces of EU–NATO cooperation: Counter-piracy operations off the Somali coast. *Cooperation and Conflict,* 50**,** 107-127.; KAUNERT, C. & ZWOLSKI, K. 2014. Somalia versus Captain 'Hook': assessing the EU's security actorness in countering piracy off the Horn of Africa. *Cambridge Review of International Affairs,* 27**,** 593-612.;

529. http://www.mc.nato.int/missions/operation-ocean-shield.aspx Accessed August 2017

530. SMITH, S. J. 2011b. EU–NATO cooperation: a case of institutional fatigue? *European Security,* 20**,** 243-264. p.257

531. CORNISH, D. P. 2006. EU and NATO: Cooperation Or Competition. Brussels: European Parliament Sub Committee on Security and Defence. p.22

lack of a grand bargain between the two organisations.[532] Further examples of parallel missions include NATO's Operation Active Endeavour, which aims to disrupt terrorist activities in the Eastern Mediterranean, and is separate to the EU's MARSUR and Frontex's Eurosur operations in the central Mediterranean.[533] Den Hertog and Carrera also comment on potential rivalries regarding information sharing operations in the Mediterranean.[534]

In sum, the security context encourages role expansion in civil military functions through member state demands or from organisational survival and expansion interests. Studies have shown that organisation preferences exist for this expansion, and that functional overlap provides incentives for role expansion generated by rivalry and competition. The next section considers expansion of procurement roles of NATO and the EU.

Procurement Role

Procurement roles are important for NATO and the EU as a contribution to the provision of security capability, and to fulfil member state requirements for cost efficiency and increased capacity. However, NATO and the EU have historically seemed impotent to increase joint procurement activity for big-ticket items. For example the procurement of

532. Ibid. p.24

533. SMITH, S. J. 2011b. EU–NATO cooperation: a case of institutional fatigue? *European Security,* 20**,** 243-264.

534. CARRERA, S. & DEN HERTOG, L. 2015. Whose Mare? Rule of law challenges in the field of European border surveillance in the Mediterranean. CEPS Liberty and Security in Europe No. 79/January 2015.

NATO's Air Command and Control System (ACCS)[535] has taken years to conclude.[536] The EDA is nominally responsible for collaborative defence procurement and initiatives such as 'Pooling and Sharing', but there has been limited procurement activity within the Agency.[537]

Three factors contribute to the lack of joint procurement activity in both organisations. First, acquiring and operating joint capabilities is costly in terms of political autonomy, so occurrences, such as NATO's AWACs capability and C17 strategic airlift capability procurement,[538] are rare.[539] The Commission's past ambitions to 'purchase, own and operate' security and defence assets, revealing role expansion ambitions, were restricted by the UK.[540] Second, an overlap in procurement policies relating to functional priorities generates dissatisfaction on political and economic levels. Here member states find that they are being offered competing procurement programmes.[541] For example, strategic airlift, air to air refuelling and surveillance capabilities are prioritised in both NATO and EU policies. Analysts also observe competitive tensions between the security capability ambitions of EU polity (which includes the EDA) and the

535. https://www.nato.int/cps/en/natohq/topics_8203.htm Accessed January 2018

536. DEBOUZY, O. 2012. Nuclear Deterrence and War. *The Oxford Handbook of War.* Oxford: Oxford University Press. p.172

537. FIOTT, D. 2015. The European Commission and the European Defence Agency: A Case of Rivalry? *JCMS: Journal of Common Market Studies,* 53**,** 542-557.

538. http://www.nato.int/cps/en/natohq/topics_50107.htm Accessed August 2017

539. GIEGERICH, B. 2010. Budget Crunch: Implications for European Defence. *Survival,* 52**,** 87-98.

540. FIOTT, D. 2015. The European Commission and the European Defence Agency: A Case of Rivalry? *JCMS: Journal of Common Market Studies,* 53**,** 542-557. p.554

541. MAULNY, J.-P. 2012. The Franco-British Treaty, The European Union's 'Pooling and sharing' and NATO's 'Smart Defence'; How can the different initiatives in terms of pooling capabilities be coordinated. Paris: IRIS. p.5

Commission, concerning defence industrial cooperation and procurement.[542] Third, there is a lack of political will for defence investment by many European states, compared to military oriented states such as the US, UK and France.[543] Here political preference for civil security investment and other domestic expenditure often prevails.

However organisations have more leeway to increase procurement activity for low value contracts that procure uncontroversial, non-kinetic assets such as satellite communication, space and surveillance assets.[544] Ease of funding plays an important part. Where organisations have committed funding for joint procurement, they are able to assert their roles in this area. This is seen in EU and NATO satellite arrangements,[545] and the funded research projects under the FP7 and Horizon 2020 Programmes.

To conclude, there has been little growth in NATO and EU procurement roles regarding high value defence items due to sovereignty concerns and member state control of funding.[546] Joint defence procurement occurs under ad hoc coalitions or agencies such as OCCAR, which was responsible for the procurement of the A400M transport

542. FIOTT, D. 2015. The European Commission and the European Defence Agency: A Case of Rivalry? *JCMS: Journal of Common Market Studies,* 53**,** 542-557.

543. VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform.; HEISBOURG, F., ISCHINGER, W., ROBERTSON, G. & SCHAKE, K. N. 2012. *All Alone?: What US Retrenchment Means for Europe and NATO*, Centre for European Reform.

544. FIOTT, D. 2015. The European Commission and the European Defence Agency: A Case of Rivalry? *JCMS: Journal of Common Market Studies,* 53**,** 542-557. p.554

545. DRENT, M. E., LANDMAN, L. & ZANDEE, D. H. 2014. *The EU as a Security Provider*, Clingendael, Netherlands Institute of International Relations. p.11

546. VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform.; GIEGERICH, B. 2010. Budget Crunch: Implications for European Defence. *Survival,* 52**,** 87-98.

aircraft.[547] NATO and EU procurement policies do not generate much collaborative acquisition, and therefore have not provided opportunities for role assertion or expansion. However, when it comes to small scale, less contentious roles such as surveillance, organisations have more control over budgets and are able to generate procurement decisions. This leads to increased security roles, as seen in NATO and EU co-financed satellite programmes and research and development projects. This may increase in the future with the recent EU Defence Action Plan with its associated research projects announced in 2016.[548]

The second part of the chapter considers bureaucratic aspects of NATO and the EU. It examines how bureaucratic structure, organisation culture and procurement practices affect delivery of the drivers for procurement.

NATO and EU Bureaucracy and Culture

This section considers organisation bureaucracy and the *means* by which different drivers for the procurement of surveillance capability are delivered. Organisation role expansion is a driver for procurement generated in the micro, organisational context. Other macro level drivers for procurement - member state rationale, symbolic strategic culture, industrial and technical imperatives - are also present in this context. The chapter considers how these are delivered via three aspects of NATO and EU bureaucracy: bureaucratic structures, organisation culture and procurement processes. Broadly speaking, NATO has an intergovernmental bureaucracy driven by member state

547. http://www.occar.int/340 Accessed August 2017

548. EU COMMISSION 2016b. European Defence Action Plan: Towards a European Defence Fund. Brussels.

preferences, and the EU Commission has a supranational bureaucracy, with strong organisational and departmental loyalties.

First, bureaucratic structures affect delivery and drivers for procurement. Relevant aspects are decision-making committees, funding arrangements, departmental structures and levels of scrutiny. Here, the measures by which organisations are scrutinised, accountable and judged transmit rational and cultural priorities, such as cost efficiency or cultural concerns related to the 'community of values'.

Second, organisational culture impacts procurement practices where staffs are guided by ideational rules or 'logics of appropriateness'.[549] Logics of appropriateness are generated from prior experience, personalities, and the professional norms of personnel, and also the ideology espoused by the organisation.[550] Here cultural norms such as the Western 'community of values' and political solidarity enter decision-making processes.[551] Staff either act in 'conscious role playing', where they use the logics rationally to achieve departmental or organisation objectives, or as the 'right thing to do', where they act instinctively via acceptance of community and organisational norms.[552] The research considers aspects of NATO and the Commission's history, recruiting practices and ideology that contribute to their cultures.

549. MARCH, J. G. 1999. *The pursuit of organizational intelligence: Decisions and learning in organizations*, Blackwell Publishers, Inc.

550. WILSON, J. Q. 1989. *Bureaucracy: What government agencies do and why they do it*, Basic Books.

551. SCOTT, R. W. 1992. Organizations: Rational, natural, and open systems. *Aufl., Englewood Cliffs (NJ)*.

552. CHECKEL, J. T. 2005. International Institutions and Socialization in Europe: Introduction and Framework. *International Organization,* 59**,** 801-826. p.804

Third, NATO and EU procurement processes bring together different actor groups: member state representatives, organisation staff and industry officials. The influence of these actors in decision-making introduces different drivers. For example, industry actors affect the extent to which technical and industrial imperatives influence decision-making. Organisations facilitate policy and procurement discussions via formal and informal meetings, conferences and events.[553] Actors from all three groups may attend these meetings and influence the proceedings. Additionally, bureaucratic standard operational processes (SOPs) ensure continued focus and momentum.

The sections below detail NATO and EU bureaucratic structures and organisational cultures as they affect the delivery of drivers. First, the research shows that structural elements such as bureaucratic arrangements, decision-making procedures and levels of scrutiny affect drivers for procurement. Second, organisation culture is considered via elements such as history, staff background and strategic culture. These also affect the presence of drivers for procurement.

NATO Bureaucratic Structure and Culture

Structure

NATO's bureaucratic structure is governed by the North Atlantic Council (NAC) which is a political body staffed by high level, member state representatives. The International Staff (IS) bureaucracy is the executive body and represents NATO's organisational interests. NATO has around 4,000 staff of which 2,000 are member state

553. TAYLOR, T. 2012. NATO's Customer and Facilitator Roles in Defence Equipment Co-operation. *In:* ARONSSON, L. & LOUTH, J. (eds.) *Reflections on Industry's Contributions to Smart Defence.* London: RUSI.

representatives. 1,000 IS personnel support the NAC and the Secretary General, and 700 Military Staff (MS),[554] support the Military Committee.[555] Thus numerically, member state representation is dominant compared to the small IS bureaucracy. This contributes to a dominant intergovernmental dynamic.[556] The IS generally exhibits little institutional autonomy, although observers contend that recent reforms have decentralised decision-making away from member state governed committees, giving the IS greater influence.[557]

The IS is organised functionally around seven divisions[558] and two independent offices.[559] These support powerful, member state committees such as CNAD, which is responsible for procurement policy at the political level.[560] The Chairman of CNAD is NATO's Secretary General, but the Permanent Chairman, the Assistant Secretary General for the Defence Investment Division (ASG DID), is an influential IS representative. The ASG DID advises the NAC on all procurement matters, and can influence and encourage procurement policy. Other NATO divisions involved with

554. MAYER, S. 2014a. Introduction: NATO as an Organization and Bureaucracy. *In:* MAYER, S. (ed.) *NATO's Post Cold War Politics - the Changing Provision of Security.* Hampshire: Palgrave Macmillan.

555. Ibid.

556. SCHIMMELFENNIG, F. 2007. Functional Form, Identity-driven cooperation: Institutional designs and effects in Post Cold War NATO. *In:* ACHARYA, A. & JOHNSTON, A. I. (eds.) *Crafting Cooperation.* Cambridge University Press. p.145

557. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333. p.313

558. Political Affairs and Security Division, Defence Policy and Planning Division, Operations Division, Defence Investment Division, Emerging Security Challenges Division, Public Diplomacy Division, Executive Management Division.
http://www.nato.int/cps/en/natohq/topics_58110.htm Accessed August 2017

559. NATO Office of Security and NATO Office of Resources
http://www.nato.int/cps/en/natohq/topics_58110.htm Accessed August 2017

560. NATO 2006b. *NATO Handbook,* Brussels. p.285

procurement policy are the Defence Policy and Planning Division (responsible for specifying NATO requirements and advising the NAC), the Defence Investment Division (responsible for developing and investing in assets and advising CNAD) and NATO Office of Resources (responsible for common funding issues and advising the Resource Policy and Planning Board (RPPB)). Thus senior member state committees, enhancing intergovernmental dynamics, control decision-making for procurement policy. Although there are standard procurement practices, governed by the AC/4-D/2661[561] document, this does not apply for high value, multinational procurement. This leads to additional complexities in creating *sui generis* procurement processes for certain transactions, such as the AGS Programme.

NATO's 'consensus' based decision-making requires unanimous consent from all member states and is core to the multilateral ethos of the Alliance.[562] This increases member state influence and affects the quality of decision-making. As a former official observed:

> when you deal with NATO it is the question of lowest common denominator, the Consensus principal. So whatever decision you want to make..... you can only realise what is the lowest common denominator.[563]

561. NATO. 1996c. *Procedures for International Competitive Bidding, AC/4-D/2261* [Online]. Available: http://webarchive.nationalarchives.gov.uk/20130102165927/http:/uknato.fco.gov.uk/resources/en/pdf/post nt_ac-4-d-2261 [Accessed April 2018].

562. TAYLOR, T. 2012. NATO's Customer and Facilitator Roles in Defence Equipment Co-operation. *In:* ARONSSON, L. & LOUTH, J. (eds.) *Reflections on Industry's Contributions to Smart Defence.* London: RUSI.;

http://www.nato.int/cps/en/natohq/topics_49178.htm Accessed August 2017

563. Personal Interview with Erling Wang

Thus the collaboration requires compromise in order to achieve agreement. The 'silence procedure' supports this decision-making process. Here proposals are accompanied by a deadline by which any dissent should be expressed, otherwise member states maintain their silence. Thus, decision-making is laborious and in practice often leads to informal routes to achieve decisions. This diversion from formal, committee decision-making weakens member state influence and IS and industry actors find influence via these informal channels.[564] This can enable their role expansion or industrial imperatives objectives to be realised.

NATO is subject to little scrutiny, in part due to its traditional, classified, military role,[565] which lowers public expectations for access to information; and in part because it is closely controlled by member states.[566] So there is little comment on the levels of transparency regarding its activities. However recent, relatively low profile observations on the lack of disclosure by NATO from bodies such as NATOwatch,[567] SIPRI,[568] and a small body of literature, note the unaccountability of the organisation.[569]

564. MICHEL, L. 2014. NATO Decision-Making: The 'Consensus Rule' Endures Despite Challenges. *In:* MAYER, S. (ed.) *NATO's Post War Politics, The Changing Provision of Security.* Basingstoke, UK: Palgrave Macmillan.

565. MAYER, S. 2014a. Introduction: NATO as an Organization and Bureaucracy. *In:* MAYER, S. (ed.) *NATO's Post Cold War Politics - the Changing Provision of Security.* Hampshire: Palgrave Macmillan.

566. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

567. http://www.natowatch.org Accessed August 2017

568. DAVIS, I. 2015. *On 'International Right to Know Day' - how transparent is NATO?* [Online]. Stockholm: SIPRI. Available: https://www.sipri.org/commentary/expert-comment/2015/international-right-know-day-how-transparent-nato [Accessed November 2017].

569. YORDANOVA, T. 2015. The Transparency - Security Dilemma in National and International Context (A Comparative Analysis of the UN and NATO's Transparency / Secrecy Policies. *Global Conference on Transparency Research.* Lugano.

Critics claim that NATO publishes little information about voting activities within the political body of the organisation; it publishes no analyses or reports relating to decision-making; and makes few disclosures on its common budget or documents needed for accountability.[570] Some countries, such as the Netherlands, publish their audits of NATO expenditures.[571] The Netherlands Court of Audit has also launched a website to try to promote transparency in NATO.[572] NATO's audit body, IBAN, has released limited audits and performance reports on agencies and other NATO bodies since 2005.[573] NATO recently issued a directive on the Public Disclosure of NATO information,[574] which builds upon previous transparency policies.[575] Although some still say this is insufficient.[576]

In sum, NATO is not subject to high levels of scrutiny by external observers, it does not disclose much information and its audit body releases limited reports. This low level of accountability leads to less discipline regarding cost efficiencies and other rational

570. Ibid.

571. DE JONG, G. 2012. Audit of NATO Expenditure. The Hague: Netherlands Court of Audit.

572.https://english.rekenkamer.nl/topics/nato-transparency-and-public-accountability/news/2014/11/18/public-accountability-for-nato-expenditure-small-rays-of-hope-but-limited-transparency Accessed August 2017

573. http://www.nato.int/cps/en/natolive/topics_111782.htm Accessed August 2017

574. NATO 2014. Directive on the Public Disclosure of NATO Information. *In:* ARCHIVES COMMITTEE (ed.). Brussels.

575. NATO policies include: a) C-M(2008)0118, NATO Information Management Policy, dated 11 December 2008; and its supporting directives; b) C-M(2002)49, NATO Security Policy, dated 18 June 2002, and its supporting Directives; c) C-M(2008)0116, Policy on the Public Disclosure of NATO Information, dated 12 November 2008; d) C-M(2002)60, The Management of Non-Classified NATO Information, dated 11 July 2002

576. YORDANOVA, T. 2015. The Transparency - Security Dilemma in National and International Context (A Comparative Analysis of the UN and NATO's Transparency / Secrecy Policies. *Global Conference on Transparency Research.* Lugano.

objectives in procurement processes. It means that inefficient member objectives for industrial work shares or technical imperatives are able to influence decision-making unchecked. The lack of scrutiny by member state constituencies and other commentators also means that macro, strategic cultural influences are not felt within the organisation.

To conclude, NATO's bureaucratic structure provides an environment where diverging member state political and industrial interests thrive and dominate organisation objectives during procurement decision-making. Here, member states have differing objectives, and IS staff have little power to encourage consensus. The 'consensus' decision-making process and the lack of scrutiny exacerbate this dynamic. The paragraphs below show that NATO's organisation culture also supports intergovernmental decision-making.

Culture

Three aspects affect NATO culture. First, that the organisation is a political and military alliance. Its initial purpose was a symbol of Western multilateralism, and a military and political deterrent to the Soviet Union.[577] Second, NATO's intergovernmental bureaucracy leads to a contested culture that lacks a cohesive esprit de corps. Third, NATO's culture is affected by the US hegemony within the Alliance.

First, NATO, as an Alliance, embodies symbolic multilateralism and solidarity. This cultural and political premise of the organisation exists alongside strategic

577. YOST, D. S. 2014. *NATO's Balancing Act,* Washington DC, United States Institute of Peace. p.4

considerations.[578] Previous studies have observed evidence of this in the AWACs and C17 Strategic Airlift procurements.[579] Second, as a military alliance, NATO's IS staff is recruited directly by NATO or seconded by governments, with military, diplomatic or defence civil service backgrounds.[580] The IS career structure is limited to a 10 year span, which means the organisation is unlikely to form an esprit de corps or institutional memory.[581] Further, the presence of 'flagged' appointments, where nations are allocated positions enhances the intergovernmental dynamics.[582] Thus personnel are not chosen via a competitive recruitment process for their expertise by the organisation, but by member states with differing recruitment policies and strategic objectives. This leads to a contested culture, difficult decision-making dynamics, and enables member state industrial and technical imperatives as drivers for procurement. Third, the US is the dominant military power within the Alliance. The US also funds a high proportion procurement of capabilities, and its appointment of key personnel within the Alliance, such as SACEUR,[583] means that US cultural elements are dominant in the generation of requirements for procurement. The US' strategic culture has an industrial imperative and bias towards military solutions, and its RMA culture emphasises surveillance and

578. NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School.

579. DAVIDSON, J. 2014. A Model for Multinational Cooperation? Three C-17's, Twelve Nations, and the Strategic Airlift Capability Program. *Defence in Depth*.; TESSMER, A. L. 1988. *Politics of Compromise: NATO and AWACs,* Washington DC, National Defense University Press.

580. NATO 2006b. *NATO Handbook,* Brussels. p.75; http://www.nato.int/cps/en/natohq/topics_58110.htm Accessed August 2017; http://www.nato.int/cps/en/natohq/who_is_who_51639.htm Accessed August 2017

581. MAYER, S. (ed.) 2014b. *NATO's Post Cold War Politics - the Changing Provision of Security,* Hampshire: Palgrave Macmillan.

582. Personal Interview with Otfried Wohlleben

583. Supreme Allied Commander Europe https://www.shape.nato.int/page214845858 Accessed September 2017

information based security solutions as well.[584] These three factors affect the attitudes and approaches of NATO staff in procurement policies and practices. Elements of these influences are identified and analysed in Chapter Four below.

Recent studies indicate that the current rhetoric of NATO, and perhaps its culture, has altered direction to reflect European member states' bias towards civil military and security culture. NATO's working practices have altered considerably since the 1990's.[585] Some argue that increased civilian and political roles are reorienting NATO's bureaucratic culture away from its military and defence origins.[586] This has arisen from four factors. First, cost cutting efforts have encouraged the MS and IS to work together on issues of joint interest diluting the military culture; second, NATO's increased involvement in crisis and peace support operations; third, an enhanced need for rapid decision-making and the use of informal decision-making channels that move away from member state bodies; and fourth, the increased political nature of operations.[587]

To conclude, NATO's organisational culture is contested due to its bureaucratic structure that is arranged around member state appointees and seconded staff. Western ideological influence is weak given the contested nature of NATO's organisational

584. GANSLER, J. S. 2011. *Democracy's Arsenal: Creating a Twenty-First-Century Defense Industry*, MIT Press.

585. GADE, J. G. & HILDE, P. S. 2014. Enduring Rules, Changing Practices: NATO's Post-Cold War Military Committee and International Military Staff. *In:* MAYER, S. (ed.) *NATO's Post Cold War Politics, The Changing Provision of Security*. Basingstoke, UK: Palgrave Macmillan.

586. MAYER, S. (ed.) 2014b. *NATO's Post Cold War Politics - the Changing Provision of Security,* Hampshire: Palgrave Macmillan.

587. GADE, J. G. & HILDE, P. S. 2014. Enduring Rules, Changing Practices: NATO's Post-Cold War Military Committee and International Military Staff. *In:* MAYER, S. (ed.) *NATO's Post Cold War Politics, The Changing Provision of Security*. Basingstoke, UK: Palgrave Macmillan.

culture and lack of public scrutiny, although there is evidence of increased input from organisation staff and other non-state actors. The implications for procurement practices are that organisational drivers for efficient procurement are diluted, and member state, calculus, technical and industrial imperatives are enhanced via intergovernmental dynamics.

EU Bureaucratic Structure and Culture

Structure

The European Commission is the civilian bureaucracy supporting the political bodies of the EU (EU Parliament and Council of the European Union). The Commission was established in 1957 and now employs over 23,000 personnel.[588] In addition, other EU services and agencies employ 10,000 staff.[589] This compares to the member state oriented bodies of the European Parliament that employs 750 MEPs and 6,000 staff in the general secretariat; and the Council of the European Union that employs 3,500 staff in the general secretariat.[590] Thus the Commission bureaucracy is significant and influential relative to the EU polity. The Commission is 'supranational' and is arranged around 33 DGs,[591] such as the DG MHA that employs 300 staff.[592] These are focussed on sectoral and functional competence. This generates organisation loyalties, and 'internationalisation' may occur, where member state interests are subsumed and

588. http://ec.europa.eu/about/index_en.htm#directorates Accessed May 2016

589. EU COMMISSION 2016c. Human Resources Key Figures Staff Figures. Brussels.

590. https://europa.eu/european-union/about-eu/figures/administration_en Accessed September 2017

591. EGEBERG, M. 2012. EXPERIMENTS IN SUPRANATIONAL INSTITUTION-BUILDING: THE EUROPEAN COMMISSION AS A LABORATORY. *Journal of European Public Policy,* 19**,** 939-950.

592. https://ec.europa.eu/home-affairs/who-we-are_en Accessed August 2017

departmental or organisational loyalties prevail.[593] The vertical organisation of DGs into areas of competence means that contacts and communications within departments are better than across departments. This leads to allegations of departmental fiefdoms and silo logics.[594]

Frontex is the Agency, formed in 2004 under the Commission's DG MHA, responsible for the monitoring of the EU's external borders.[595] Frontex is responsible for the coordination, procurement and performance of surveillance infrastructure and capability. The Agency is governed by a Management Board, which is made up of member state representatives.[596] It has three major divisions: Operations Division, Capacity Building Division and the Corporate Governance Division. The Operation's Division is where the Frontex Situation Centre (FSC) is situated and surveillance software is implemented. The Capacity Building Division includes the Research and Development Unit (RDU) that writes specifications for much of Frontex procurement, and the Pooled Resources Unit, which coordinates surveillance operations. Finally, the Corporate Governance Division includes the Financial and Corporate Services Unit. This unit oversees procurement processes, and the Information and Communication Technology (ICT) Unit, which procured the Eurosur Communication Network (ECN) contract.[597] The

593. MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

594. MARCUSSEN, M., TRONDAL, J., VEGGELAND, F. & LARSSON, T. 2010. *Unpacking International Organisations: The dynamics of compound bureaucracies,* Manchester, Manchester University Press. p.63

595. LAITINEN, I. 2008. Frontex: an inside view. *EIPAScope,* 2008**,** 1-4.

596. http://frontex.europa.eu/about-frontex/organisation/management-board/ Accessed January 2017

597. http://frontex.europa.eu/about-frontex/organisation/structure/ Accessed January 2017

Agency has around 360 employees[598] and benefits from significant support of DG MHA for resources, political weight and strategic vision. Its procurement structures for low value contracts are structurally embedded in the organisation and it benefits from pan EU Commission standard processes for precedent and support.

The Commission and Frontex are subject to scrutiny regarding their security activities, particularly those relating to border surveillance and migration.[599] There is a high level of public and academic interest in this regard and bodies, such as Statewatch,[600] monitor their activities where they may impact on civil liberties. This reflects interest and unease at the Commission's expanding role in this area, and also transmits cultural imperatives for human rights and humanitarian behaviour.

> 'what is peculiar about Frontex is that it is operating in the humanitarian borderlands of Europe. Consequently, its operations are exposed to a greater level of scrutiny and demands for transparency, but at the same time also vested with a greater sense of political urgency.'[601]

598. http://frontex.europa.eu/pressroom/faq/about-the-agency/ Accessed August 2017

599. POLLAK, J. & SLOMINSKI, P. 2009. Experimentalist but not Accountable Governance? The Role of Frontex in Managing the EU's External Borders. *West European Politics,* 32**,** 904-924.; HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; HAYES, B. & VERMEULEN, M. 2012. *Borderline: The EU's New Border Surveillance Initiatives: Assessing the Costs and Fundamental Rights Implications of EUROSUR and the" Smart Borders" Proposals: a Study by the Heinrich Böll Foundation*, Heinrich-Böll-Stiftung.; HAYES, B., JONES, C. & TOPFER, E. 2014. Eurodrones Inc. Amsterdam: Statewatch.; AKKERMAN, M. 2013. Selling Border Militarization as a Humanitarian Effort. *Stop Wapenhandel*.; AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.; AKKERMAN, M. 2016a. Border Wars II An update on the arms industry profiting from Europe's refugee tragedy. *Policy*.

600. http://www.statewatch.org Accessed August 2017

601. AAS, K. F. & GUNDHUS, H. O. I. 2015. Policing Humanitarian Borderlands: Frontex, Human Rights and the Precariousness of Life. *The British Journal of Criminology,* 55**,** 1-18. p.15

The amount of information available and disclosed by the Commission facilitates this observation and criticism. While exact details of policy decision meetings are not released, the Commission has a transparent disclosure process regarding legislation. Here, the EU Official Journal publishes drafts of legislation and shows EU Parliamentary comment on these documents.[602] EU citizens also have a right of access to documents under Regulation 1049/2001.[603] Further, Commission activity is formally subject to scrutiny from the European Court of Auditors (ECA). This body reports on financial activities of the Commission, including security activities, and in this way it has an important influence on security policy and procedures.[604] For example in 2012, the ECA criticised EU activities in Kosovo, relating to weak coordination, procurement procedures and lack of exit strategy.[605] This elicited a response from the EU Commission and the European External Action Service (EEAS) as to how future policy would alter to meet those recommendations.[606] In sum, there is evidence of sensitivity by the Commission and Frontex to the level of scrutiny under which is it placed.[607] This affects policy and procurement decisions related to security capability where internal and external expectations for aspects such as procurement cost efficiency, Western libertarian values and relationships with industry, are likely to be referred and adhered to.

602. http://eur-lex.europa.eu/oj/direct-access.html Accessed August 2017

603. EU COMMISSION 2001b. REGULATION (EC) No 1049/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2001 regarding public access to European Parliament, Council and Commission documents. Brussels.

604. DRENT, M. E., LANDMAN, L. & ZANDEE, D. H. 2014. *The EU as a Security Provider*, Clingendael, Netherlands Institute of International Relations.

605. EUROPEAN COURT OF AUDITORS 2012. European Union Assistance to Kosovo related to the rule of law. *Special Report No.18/2012.* Luxembourg. p.49-62

606. Ibid. p.49-62

607. Interview with 005; Interview with Louis Galea

In sum, the Commission is a supranational, bureaucratic structure organised along departmental lines rather than on member state delegations. This reduces bureaucratic politics and enables efficient decision-making. The Commission's bureaucratic structure delivers cultural influences via similar methods to those suggested for NATO above. Here, conferences and forums enable non-state, normative bodies such as NGOs to have input into policy making. Cultural influences are also absorbed via internal and external scrutiny. The Commission's organisation culture is examined in greater detail below.

Culture

EU origins are bound in civilian trade development and as a vehicle to express solidarity after the Second World War, when three communities were formed to foster cooperation.[608] The ideology of the Commission encompasses political solidarity and Western values of progress and democracy.[609] These aspects and the civilian origins are reflected in the organisation culture. Some view the Commission as a complex and fragmented organisation,[610] and others assert that there is a reasonable *esprit de corps* and Commission wide culture.[611] However, most academics agree that the Commission has a cohesive organisation culture within its DG's, and is successful in integrating

608. KEGLEY, C. & BLANTON, S. 2012. *World Politics: Trend and Transformation, 2012-2013 Edition*, Cengage Learning. p.167

609. SCHIMMELFENNIG, F. 2003. *The EU, NATO and the Integration of Europe*, Cambridge University Press.

610. MÖRTH, U. 2000. Competing frames in the European Commission - the case of the defence industry and equipment issue. *Journal of European Public Policy,* 7**,** 173-189.; CRAM, L. 1994. The European commission as a multi-organization: Social policy and IT policy in the EU. Ibid.1**,** 195-217.;

611. NUGENT, N. & RHINARD, M. 2015. *The European Commission*, Palgrave Macmillan. p.227;

member state seconded officials.[612] Departmental loyalty can lead to cultural conflict between DGs due to different ideologies and competencies. Nonetheless, studies have found evidence of cultural coherence between DGs where the Commission deals with the external environment.[613] In sum, there is a cultural cohesion within the Commission departments that facilitates procurement policy and decision-making.

This study is concerned with the organisational culture of two departments in the Commission, DG MHA, and Frontex. Few studies explore the Commission's organisation cultures in specific departments and their relationship to activities such as procurement. Some consider the origins of the bureaucracies,[614] but these do not focus on the implications of organisation culture for decision-making. The sub cultures of these departments are significant for generation or facilitation of drivers for procurement. DG MHA was one of the later DG's to be formed in 2001, when the Commission's mandate in Justice and Home Affairs (JHA) was established.[615] While many staff were initially seconded from other DG's, this department had to establish

612. MÖRTH, U. 2000. Competing frames in the European Commission - the case of the defence industry and equipment issue. *Journal of European Public Policy,* 7**,** 173-189.; MARCUSSEN, M., TRONDAL, J., VEGGELAND, F. & LARSSON, T. 2010. *Unpacking International Organisations: The dynamics of compound bureaucracies,* Manchester, Manchester University Press.; CRAM, L. 1994. The European commission as a multi-organization: Social policy and IT policy in the EU. *Journal of European Public Policy,* 1**,** 195-217.; TRONDAL, J., VAN DEN BERG, C. & SUVARIEROL, S. 2008. The Compound Machinery of Government: The Case of Seconded Officials in the European Commission. *Governance,* 21**,** 253-274.

613. MÖRTH, U. 2000. Competing frames in the European Commission - the case of the defence industry and equipment issue. *Journal of European Public Policy,* 7**,** 173-189.

614. VAN MUNSTER, R. 2009. *Securitizing immigration: The politics of risk in the EU*, Springer. p.83; EKELUND, H. 2014. The Establishment of FRONTEX: A New Institutionalist Approach. *Journal of European Integration,* 36**,** 99-116.

615. VAN MUNSTER, R. 2009. *Securitizing immigration: The politics of risk in the EU*, Springer. p.83

itself and expand its mandate in competition with the EU Council and existing DG's.[616] This has encouraged a culture of expansion, using logics of appropriateness to align with member state security culture. For example, the preamble of the DG MHA budget in 2011 reads like a security strategy.[617] This meets member state strategic concerns and Western 'community of values' culture, justifying expenditure and procurement initiatives within the security context.

Frontex has a different staff profile to DG MHA, as many of its staff were originally seconded national experts and formerly worked in member state border agencies, national militaries, NATO or the EDA.[618] However the assimilation of these staff and their similar security backgrounds leads to formation of a coherent organisation culture.[619] Here, the logics of appropriateness become 'taken for granted', and inefficient drivers for procurement - such as member state sponsorship of national industry - do not occur to staff, as their interests are focussed on organisation and departmental objectives

616. YOUNGS, R. 2008. Fusing Security and Development: Just Another Euro-platitude? *European Integration,* 30**,** 419-437.; VAN MUNSTER, R. 2009. *Securitizing immigration: The politics of risk in the EU*, Springer.

617. EU COMMISSION 2011a. Building an open and secure Europe: the home affairs budget for 2014-2020 COM(2011) 749 final. Brussels.

618. LAITINEN, I. 2008. Frontex: an inside view. *EIPAScope,* 2008**,** 1-4.; POLLAK, J. & SLOMINSKI, P. 2009. Experimentalist but not Accountable Governance? The Role of Frontex in Managing the EU's External Borders. *West European Politics,* 32**,** 904-924.; AAS, K. F. & GUNDHUS, H. O. I. 2015. Policing Humanitarian Borderlands: Frontex, Human Rights and the Precariousness of Life. *The British Journal of Criminology,* 55**,** 1-18.; Personal interviews with Gregorio Ameyugo Catalan, 005, 008.

619. TRONDAL, J., VAN DEN BERG, C. & SUVARIEROL, S. 2008. The Compound Machinery of Government: The Case of Seconded Officials in the European Commission. *Governance,* 21**,** 253-274.; HOOGHE, L. 2012. Images of Europe: How Commission Officials Conceive Their Institution's Role. *JCMS: Journal of Common Market Studies,* 50**,** 87-111.; Personal interview 005

rather than national interests.[620] Frontex culturally aligns itself with the Western 'community of values'. A study by Aas and Gundhus considered the Agency's international policing activities and explored officials' behaviour and attitudes with reference to humanitarian and other Western values.[621] The study found that human rights and humanitarian ideals feature prominently in the Agency's internal discourse',[622] noting the Agency's motto of 'Humanity, open communication, professionalism, trustworthiness, teamwork'.[623] Further, the Code of Conduct and training procedures all stress the centrality of fundamental rights and the right to international protection.[624] However, it found that this contrasted with the Agency's approach to risk analysis and frontline practices of border control coordination.[625]

NATO and EU Collaborative Procurement Processes

Four stages of generic procurement decision-making are considered below: policymaking, specification, funding, and implementation. This section considers these processes as they exist in NATO and the EU and identifies the input and influence of member state representatives, organisation actors and industrial officials at each stage.

During the policy stage, member states agree policy regarding NATO and the Commission owning and operating a capability, and therefore their objectives are dominant. As noted in Chapter Two, drivers for collaborative procurement policy may

620. Personal interview with 003

621. AAS, K. F. & GUNDHUS, H. O. I. 2015. Policing Humanitarian Borderlands: Frontex, Human Rights and the Precariousness of Life. *The British Journal of Criminology,* 55**,** 1-18.

622. Ibid. p.4

623. Ibid. p.4

624. Ibid.

625. Ibid. p.13

include joint operation of a strategic capability, acquiring cost efficient assets, and achieving technical and economic benefits for national industry. The initial generation of requirements is a key stage. In NATO this occurs via the Military Headquarters in SHAPE by member state run committees. In the EU, policy legislation is proposed by the Commission and authorised by the EU Council. Procurement requirements are also proposed by DGs and Agencies in their Work Programmes and then approved by the Commission.

NATO and the Commission provide forums for member state strategic discussions and consensus building for policy and procurement processes. Here headline conferences impose deadlines for decisions,[626] such as NATO Summits or EU Committee meetings. Decision-making bodies, for example, NATO's CNAD or the Commission's DG MHA, involve external figures in advisory roles.[627] CNAD oversees meetings of expert groups that exchange information about evolving military needs and technology, for example NATO's Industrial Advisory Group (NIAG).[628] Here, industrial figures may give input into NATO procurement policy, enhancing the potential for industrial imperatives to enter the decision-making process. Equivalent dynamics are found in DG MHA. For example, the External Security Research Board (ESRAB) was formed to advise on security research policy. This body was criticised for its reliance on industrial

626. REINALDA, B. & VERBEEK, B. 2004. *Decision Making Within International Organizations,* Abingdon, ROUTLEDGE ECPR STUDIES IN EUROPEAN POLITICAL SCIENCE. p.238

627. MARCUSSEN, M., TRONDAL, J., VEGGELAND, F. & LARSSON, T. 2010. *Unpacking International Organisations: The dynamics of compound bureaucracies,* Manchester, Manchester University Press.; MAYER, S. 2011. Embedded Politics, Growing Informalization? How NATO and the EU Transform Provision of External Security. *Contemporary Security Policy,* 32**,** 308-333.

628. NATO INDUSTRIAL ADVISORY GROUP 2013. Update for NDIA International Division. Brussels: NATO Defence Investment.

figures.[629] Other influential bodies such as the European Organisation for Security (EOS) also hold roundtables with industry input for security policies.[630] Parliamentary Committees and conferences, such as the EU's LIBE Committee,[631] also include EU parliamentary representatives and NGO's who promote cultural norms and human rights influences.[632] Once registered, these cultural aspects of policy are hard to ignore at future stages of the procurement.[633]

At the specification stage, organisation staff and industry actors become further involved as they contribute to proposals for security solutions. These are submitted to member state bodies for approval, often a Board of Directors who oversee the procurement process. For example NATO's Airborne Early Warning Programme Office oversaw the specification process for AWACS.[634] For NATO satellite contracts this takes place via the NATO Communication and Information Agency (NCI).[635] In the EU, organisation actors such as Frontex Research and Development Unit (RDU), write the specification.

629. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; BIGO, D., JEANDESBOZ, J., MARTIN-MAZE, M. & RAGAZZI, F. 2014. Review of Security Measures in the 7th Research Framework Programme FP7 2007-2013. *Study for the LIBE Committee.* Brussels: European Parliament.

630. EOS 2012a. High Level Security Roundtable Brussels. Brussels.; EOS 2012b. THE INNOVATIVE APPROACH OF THE EOS RECOMMENDATIONS FOR AN INTEGRATED SURVEILLANCE OF THE EU MARITIME DOMAIN. Goteborg.

631. Responsible for Civil Liberties, Justice and Home Affairs
http://www.europarl.europa.eu/committees/en/libe/home.html Accessed April 2018

632. REINALDA, B. & VERBEEK, B. 2004. *Decision Making Within International Organizations,* Abingdon, ROUTLEDGE ECPR STUDIES IN EUROPEAN POLITICAL SCIENCE. p.26

633. Ibid. p.26

634. TESSMER, A. L. 1988. *Politics of Compromise: NATO and AWACs,* Washington DC, National Defense University Press. p.62

635. https://www.ncia.nato.int/NewsRoom/Pages/160726_Announcement_3billion_investments.aspx Accessed August 2017

Frontex also has a member state Management Board that oversees activities.[636] If there is member state reticence and debate, the persuasive powers of organisation staff and their industry advisors may prove essential for the procurement process. For example NATO IS was described as an 'honest broker' during AWACs procurement.[637] Here, organisation staff and industry officials may enable the procurement, driven by role expansion or industrial imperatives.

Funding commitment is crucial for procurement. Funding decisions vary with the size and format of the procurement contracts. They may be made via centrally controlled, organisational processes or by individual member state commitment. Central funding is found in Commission funding for outsourced capabilities such as satellite facilities, or NATO's centrally funded Resource Policy and Planning Board (RPPB) which funds much of NATO's infrastructure programmes.[638] The Commission funds its low value civil security procurement and operations centrally via the DG MHA. Here, the DG and its Agencies do not have to refer directly to member states during disbursement. This reduces intergovernmental debate on immediate use of funds and heightens the influence of Commission decision-making. The Commission also ensures that there are sufficient funds to perform certain security roles. For example, there are earmarked funds for functions such as border security in the External Borders Fund,[639] the Internal

636. http://frontex.europa.eu/about-frontex/organisation/management-board/ Accessed September 2017

637. TESSMER, A. L. 1988. *Politics of Compromise: NATO and AWACs,* Washington DC, National Defense University Press. p.62

638. http://www.nato.int/cps/en/natohq/topics_67653.htm Accessed August 2017

639. EU COMMISSION 2007a. DECISION No 574/2007/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 May 2007 establishing the External Borders Fund for the period 2007 to 2013 as part of the General programme 'Solidarity and Management of Migration Flows'. Brussels.

Security Fund,[640] and also Emergency Funds that can be drawn down.[641] In high value, multinational procurement projects, such as the EU's A400M or NATO's AWACS, C17s and AGS, member states make individual contributions which are negotiated on a nation by nation basis. This makes the procurement process complex and protracted.[642]

In sum, member state, organisation and industry actors contribute at different stages of the procurement process. This enables delivery of drivers to differing extents. Member state representatives dominate early policy stages, where diverging objectives lead to bureaucratic politics and compromised solutions. This can be resolved by building consensus through compromise and reference to cohesive and shared strategic cultures. Organisation staff is often involved at this stage. Industrial actors also have input into policy and specification stages, where they may introduce industrial and technical imperatives for procurement. They may also refer to civil military or Western 'community of values' cultures to encourage the collaboration. Organisation actors are present throughout the stages and may encourage the process because of role expansion drivers.

640. EU COMMISSION 2014. REGULATION (EU) No 515/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 establishing, as part of the Internal Security Fund, the instrument for financial support for external borders and visa and repealing Decision No 574/2007/EC. *In:* DG MIGRATION AND HOME AFFAIRS (ed.). Brussels.

641. Ibid.

642. TAYLOR, T. 2012. NATO's Customer and Facilitator Roles in Defence Equipment Co-operation. *In:* ARONSSON, L. & LOUTH, J. (eds.) *Reflections on Industry's Contributions to Smart Defence.* London: RUSI.

Conclusion

This chapter has considered the micro, organisation context for multilateral procurement of surveillance capability. It described how NATO and EU security roles, procurement processes, bureaucratic structure and organisation culture affect procurement decision-making. It considered how organisation role expansion and other macro level drivers for procurement are delivered in the organisation context. The chapter identified incentives and intentions for both NATO and the Commission to expand their security roles in a changing security environment. It concluded that role expansion could shape preferences for procurement of surveillance capability for both NATO and the Commission. NATO has incentive to expand its role to meet the civil military, security provision expectations of its member states. The Commission has institutional incentives to expand and assert its security roles in a sector where it previously had little competence.

The chapter found that procurement process, bureaucratic structure and organisational culture delivered drivers for procurement to differing extents. It identified that factors, such as funding structures and scrutiny, affected the presence of drivers such as member state industrial imperatives and macro level, cultural drivers for procurement. NATO and the Commission's differing bureaucratic structures have implications for decision-making dynamics and dominance of actor objectives in procurement processes. NATO's intergovernmental structures and weak executive body enhances bureaucratic politics dynamics and dilutes organisation culture. Conversely, the strength of the Commission bureaucracy and culture reduces bureaucratic politics and streamlines decision-making for procurement and the related funding commitments. This lends

power to the Commission, and increases influence in procurement policy making and process. NATO is subject to low levels of scrutiny and therefore inefficient decision-making dynamics such as intergovernmental bureaucratic politics, or industrial imperatives continue with little public criticism. Thus societal, cultural expectations are little heeded and member state industrial and political incentives given heavier weight. In contrast, the Commission and Frontex are subject to high levels of scrutiny. This encourages a disciplined approach regarding cultural and efficiency expectations for procurement decision-making. Both NATO and the Commission share the Western 'community of values' that provides a cohesive ideology within which member states agree to security and surveillance policy and procurement.

The next two chapters present the case studies. Chapter Four analyses NATO's procurement of its AGS capability. Here, NATO's intergovernmental structure facilitated the initial policy, which was driven by the US, but then distracted and constrained decision-making. This resulted in a protracted procurement process that was eventually facilitated by cohesive political and cultural factors. Chapter Five analyses two contracts, the Commission's procurement of its Eurosur Communication Network infrastructure and Aerial Surveillance Services. Here supranational structures enabled a concerted, organisation drive towards a surveillance capability, and cultural factors heightened and drove the efficiency of the procurement process.

Case Studies

This brief section introduces the case studies. The research addresses two case studies that are considered relevant and valid to assess the social processes of collaborative procurement and answer the research question: is multilateral procurement of surveillance capability driven by culture or calculus? NATO's procurement of its AGS Programme involves just one contract, and is managed by the prime contractor, Northrop Grumman (NG). This procurement is considered in Chapter Four below. The EU Commission's procurement of surveillance capability is not governed by a single contract with a prime contractor, rather Frontex manages separate contracts. Chapter Five considers two of those contracts, the procurement of the Eurosur Communication Network (ECN) software, and the procurement of Aerial Surveillance Services (ASS). These case studies are both examples of collaborative, multilateral procurement of surveillance capability. They contain similar elements of calculus and culture that generate data for analysis.

Although the procurement processes in the case studies are considerably different regarding scale and format, there are enough commonalities in the political, security and organisation context to justify their consideration in the same research project. NATO and the EU are both situated in a Western security context and serve a similar, constituency. They have 21 overlapping states, (NATO has notable extra states of Turkey, the US and Canada). Commonalities considered in the case studies include the attitude of member states towards the need for the capability and the effect of the macro, cultural context and societal ideas upon the procurement process. Further commonalities relate to the international organisational context of the procurement. The

case studies consider NATO and EU decision-making processes, financing arrangements, and the relationship with the industrial contractors providing the surveillance solutions. The research demonstrates how NATO and EU bureaucracy and culture affect the delivery of the procurement drivers.

The differences in contract characteristics mean that any commonalities found in the conclusions have a deeper significance than those with similar contract characteristics. If the contracts were similar then the research would essentially be demonstrating the one conclusion. Where the contracts are different and similar findings result then these have a greater weight. The findings discovered in the chapters below are not exactly the same for each case study, but they indicate similar cultural influences in the discourse surrounding the collaborative procurement decision-making.

The case study chapters divide each case study into sections examining the decision-making at different stages in the acquisition process: the generation of procurement policy for the surveillance capability, decisions regarding the specification, and the contractual process for the procurement. They sift through the evidence regarding different drivers for procurement identified in the previous chapters: rational choice, industrial and technical imperatives, strategic cultures and multilateralism and organisation role expansion. The analysis of each case study offers findings regarding four aspects of the collaborative procurement: what drivers led to an acceptable strategic rationale and mission for the surveillance capability; what drivers led to political support for the policy and procurement; what drivers led to the final surveillance solution chosen; and how did the NATO and EU bureaucracies affect the balance of drivers. This is illustrated in the figure below:

Calculus and Cultural Drivers for successful, collaborative procurement of a surveillance capability

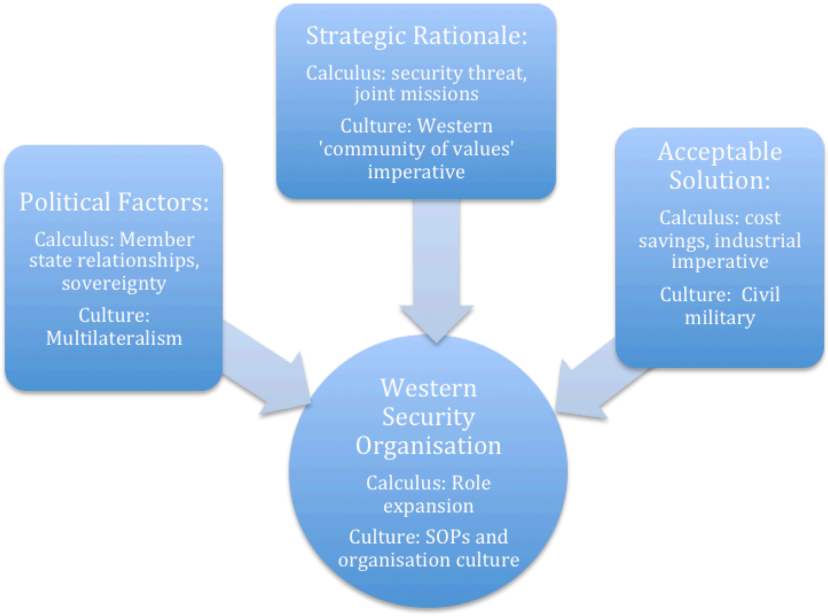

Figure 5. Calculus and Cultural Drivers

Chapter 4: NATO Case Study

Introduction

This case study considers decision-making for NATO's procurement of air-to-ground surveillance capability, known as the AGS Programme (the Programme). This has been in the process of acquisition since 1992, and should come into operation during 2018. The Chapter explores the drivers of the decision-making for three Programme proposals considered by NATO over this 25 year period: the original JStars solution; the Mixed Fleet Solution; and the final Global Hawks solution. The current contract acquires the AGS 'Core Capability': five Global Hawks, the related radar equipment and ground stations (the Contract).[643] NG is the Prime Contractor, producing the Global Hawk aircraft and related radar assets; European sub contractors are delivering the mobile and transportable ground stations and providing operational support at Sigonella, the Sicilian base from where the Global Hawks will fly.

Analysis of this contract is significant as an example of NATO's contemporary relevance regarding the functions of surveillance and collaborative procurement. In an environment of rising equipment costs and stretched Western European defence budgets, NATO's AGS Programme gives European[644] member states access to surveillance assets that they could not otherwise afford. It fills a gap in transatlantic capabilities, delivers a modern capability for NATO operations, and will be a capability both owned and operated by NATO. This status was never achieved by the AWACs

643. Hereafter known as the 'Contract'

644. Throughout this Chapter 'European' Member States denotes Member States other than the US. For ease of reference Canada is assumed to come under this grouping.

capability, which is still owned by member states.[645] However, the 25 year lead time for AGS reflects negatively on the decision-making processes in the organisation. The study focuses on the importance of the NATO organisation. First, regarding to its ISR role in the Western strategic cultural context and the impact of this upon the procurement; second, the influence of NATO's bureaucracy and culture on the procurement process; and finally, the implications of cultural, symbolic aspects such as multilateralism, solidarity and legitimacy associated with NATO.

Officials who worked on the Programme since its inception note that AGS proposals needed to satisfy three criteria in order to succeed: cost considerations, member state industrial participation (IP), and political support of member states.[646] The research demonstrates that intergovernmental debates within NATO led to difficulties in finding a solution that satisfied these three criteria. It explores cultural elements underlying the political support, such as multilateralism associated with NATO, which are significant for the success of the procurement. Other cultural influences relate to role expansion into civil military functions (such as transnational border surveillance) and 'community of values' driven roles which use surveillance, such as humanitarian aid.

Evidence showed that NATO's procurement processes are not organised to contain bureaucratic politics, and indeed the bureaucratic structure exacerbates these dynamics. Member state representatives on the Military Committee, CNAD and the NAC decided the AGS Programme policy, specification and financial commitment. Here, organisation staff had little influence. Crucially, member states only committed funding

645. See Chapter Three above

646. Telephone Interview with Bob Zeiser and Matt Copija

after the specification of the capability, to ensure their objectives were met.[647] In other words, member state industrial imperatives and *juste retour* concerns, delayed funding commitment until specification and sub contractors had informally been agreed. Further, member state appointees rather than a professional procurement team staffed the NATO AGS Project office[648] in the initial stages. This embedded intergovernmental debate at all levels in the AGS specification decision-making. The research found two overarching calculus influences on the early AGS procurement policy and decision-making: US industrial imperatives regarding the JStar capability; and the *juste retour* driver by member states to gain benefits for national industry.

First, data revealed US political and industrial involvement from the early stages of the AGS procurement policy, through to the final specification of the Global Hawks. The constancy of the US industrial presence and its political support is demonstrated throughout the Programme's history, and was a major factor behind the persistence of the Programme against strong intergovernmental debate over the AGS solutions. Member state *juste retour* and industrial imperatives were driven by political and defence industry interests for the acquisition of technical skills, and in profits and jobs. Four factors helped. First, the lack of urgency for the capability - there was no direct threat to member states that required surveillance assets and to drive the pace of the procurement. European member states also relied on the availability of US assets as a fall-back option (much to the irritation of the US).

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647. Telephone Interview with Malcolm Fages

648. Variously known as The Embryonic Project Office (EPO), the Provision Project Office (PPO), and Alliance Ground Surveillance Supplemental Services Office (AGS3). This last oversaw the procurement to PMOU stage.

Second, NATO's 'consensus' decision-making processes empowered member states and enabled bureaucratic political dynamics as they vied for national contracts, and control of the Programme funding. Third, the procurement was not for member state assets but for NATO. This reduced member state procurement objectives for efficiency and timeliness, and enhanced objectives such as industrial participation (IP) and technical transfer. Fourth, there was a lack of public scrutiny and accountability to member state constituencies concerning the efficiency of the AGS Programme procurement. This reflected the limited information released by NATO, and also an acceptance by commentators of the complexities for such large acquisitions, which require compromise to succeed. Significantly, this meant that inefficient *juste retour* and industrial imperatives within the AGS procurement proceeded with little public censure.

The research concluded that the failure of the first two AGS proposals (JStar and Mixed Fleet) indicated that *juste retour*, industrial imperatives, strategic military calculus were insufficient drivers to conclude the AGS Programme. Four additional drivers were needed to obtain member state support and financial commitment to the Programme. These were, first, heightened cost considerations. The study demonstrates that the final specification for an 'off-the-shelf' US capability, the Global Hawks, gained political support and met cost considerations better than previous solutions identified. There was also evidence of symbolic drivers for industrial partners who were keen to be associated with NATO for legitimacy reasons and for future business. Second, NATO's cultural standard operating procedures (SOPs) did not allow the Programme to die when the first proposals failed.[649] The existence of NATO's Minimum Military Requirement (MMR),

649. NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School.

dedicated NATO leadership and staff urging the process forward with reference to CNAD meetings and NATO summits, and the tenacity of the AGS team in proposing alternative solutions, proved essential in maintaining the Programme. Third, symbolic factors associated with solidarity and multilateralism played a role after the expansion of NATO to new member states. These newer member states participated in the Programme for these symbolic reasons, giving it a critical, political mass. Leon Panetta underlined the general symbolic importance of the procurement for NATO in 2011:

> AGS is a crucial symbol of alliance collaboration. If we are going to move into the future, if we to have a cooperative relationship with regards to capabilities this is crucial to be able to put into place. AGS is not only a crucial symbol of alliance cooperate it is indeed a true bargain for NATO. Unless it is implemented successfully, the drive for similar, cost-effective, multinational approaches to capability development would be seriously undermined.[650]

Fourth, the re-articulation of the AGS mission to include civil military roles such as border control and disaster relief aided the generation of political will by European member states.[651]

650. PANETTA, L. E. 5 October 2011 2011. *RE: Remarks by Secretary Panetta at Carnegie Europe, Brussels, Belgium.*

651. Phone interview with Matt Copija

A summary of events is outlined below indicating the Case Study chapter structure:

Timeline 1993 – 2014[652]

Section 1: NATO AGS Policy and JStar Proposals

1993	US proposes JSTARs aerial ISR solution to NATO after their successful use in the first Gulf War AGS becomes a NATO Minimum Military Requirement (MMR)
1995	NATO Conference of National Armaments Directors (CNAD) endorses recommendation for NATO 'owned and operated' AGS capability
1997	CNAD decides to drop the US JSTAR proposal.

Section 2: Mixed Fleet Proposal, Global Hawk Proposal	
1998 - 2002	CNAD considers 2 radar solutions: NATAR[653] (US, Belgium, Canada, Denmark, Luxembourg and Norway); SOSTAR[654] (France, Germany, Italy, the Netherlands and Spain) CNAD considers 2 platform solutions for the ASG Programme: TIPS[655] Proposal (NG EADS and Finmeccanica, using the Airbus 321s and Global Hawks);

652. This timeline draws from documents that include NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School.; CHAO, P. 2004. NATO AGS - Finally Ready to Fly? Washington: Centre for Strategic and International Studies.; RIPLEY, T. 2006. Airborne Ground Surveillance - Taking the High Road. *Jane's Defence Weekly*.

653. NATAR: NATO Transatlantic Advance Radar Programme

654. SOSTAR: Standoff Surveillance Target Acquisition Radar

655. TIPS: Transatlantic Industrial Proposed Solution

	CTAS[656] Proposal (Raytheon and European Partners, using Bombardier business jets)
2002	Transatlantic Cooperative AGS Radar (TCAR) formed out of NATAR and SOSTAR;
2004	CNAD endorses TIPS Mixed Fleet proposal and development of TCAR radar
2005	TIPS proposal shrinks to 5-6 Airbus 321s and 7 Global Hawks ($4bn budget); using US MP RTIPs[657] radar rather than developing the European TCAR radar.
2007	Airbus 321s eliminated from AGS consideration; 'spiralling costs and inability of partners to agree on a common way' force all previous AGS agreements to be scrapped
Section 3: The AGS PMOU and Contract	
2008	AGS revived with NG as sole Prime Contractor; $1.4bn; for 8 Block 40 RQ-4 Global Hawk high-altitude long-endurance (HALE) unmanned aircraft system including MP-RTIP radar and supporting ground elements;
2009	Programme Memorandum of Understanding (PMOU) signed; US, Germany and Italy are the largest contributing Member States; NATO AGS Management Organisation (NAGSMO) and NATO AGS

656. CTAS: Cooperative Transatlantic AGS Solution

657. MP RTIPS: Multi Platform Radar Technology Insertion Programme

	Management Agency (NAGSMA) formed as the Procurement bodies for the Contract;
2011	AGS programme cut to 5 Global Hawks $1.4bn Contract Terms and Conditions finally agreed
2012	NATO Chicago Summit formal signature for AGS programme; still open to other member state contributions
2014	Poland confirms that it is to re-join the Programme

The chapter focuses on three chronological periods (described above) in the procurement timeline. First, the formation of NATO's AGS Policy and the first iteration for the AGS solution, the JSTARs[658] (1993 - 1999); second, the Mixed Fleet[659] proposal, events leading to the decision for the unmanned Global Hawks solution, and the agreement to the AGS Programme Memorandum of Understanding (PMOU) (2000 - 2009); third, the final agreement for the Contract and the conclusion of member state participation (2009 - 2014). The Programme is still in its delivery stage as this thesis is being written, but it is unrealistic to analyse the on-going developments. These concluding stages of the Contract are not necessarily significant in demonstrating additional drivers for procurement decision-making, over and above the decision-making of previous stages.

658. JSTARS: Joint Surveillance Attack Radar System

659. Manned Airbus 321s and unmanned Global Hawks

NATO multinational programme procurement processes are opaque.[660] There are no published records of any tendering notices and little information was disclosed in the interviews for this study. The standard NATO procurement document AC/4-D/2661[661] was not used as it does not apply to the multinational procurement format.[662] Therefore the study has pieced together information from interview data and public documents, considering these with the procurement outcomes and public commentary.

Events and decisions will be analysed in the macro context of Western security concerns and the micro organisational context of NATO's bureaucracy to identify drivers for the procurement. These include the strategic necessity for the Programme, technical imperatives, industrial imperatives, and NATO role expansion, as well as societal expectations relating to NATO's provision of security, bureaucratic drivers related to standard operating procedures (SOPs), symbolic, ideational drivers of multilateralism and prestige associated with NATO and the AGS Programme. It categorises these drivers into either calculus or cultural motives. Final analysis of the case study will consider four aspects of the collaborative procurement alluded to in the Case Studies Introduction above: Strategic rationale, political factors, acceptable solution and role of the organisation.

660. Personal Interview with Brooks Tigner

661. NATO 1996b. Procedures for International Competitive Bidding AC/4-D/2661 (1996 Edition). *In:* INFRASTRUCTURE COMMITTEE THE NATO SECURITY INVESTMENT PROGRAMME (ed.). Brussels: NATO.

662. Personal Interview with Otfried Wohlleben

Section 1: Initial NATO AGS Policy and JStar Proposals (1993 - 1999)

In 1991, American and Canadian forces, as part of a UN Coalition, attacked Iraqi forces that were attempting to leave Kuwait via Highway 80. With their air ground surveillance capability, using US JStars, the coalition forces were able to detect and destroy hundreds of vehicles. This resulted in the well-known image of the 'Highway of Death'. This operation was the first to demonstrate the utility of air to ground surveillance in military campaigns and generated a call, by the US,[663] for NATO to have an AGS capability for future operations. This section considers drivers for the initial adoption of the AGS Procurement into NATO's bureaucracy via a Minimum Military Requirement (MMR). It finds evidence for calculus incentives behind the first, unsuccessful, proposals made by NG to provide this capability, the JStar E-8 aircraft and associated radar systems. These included the strategic need for European ISR capabilities for NATO led expeditionary warfare, and technical and industrial imperatives. The major proponents for the capability were the US, who had industrial objectives concerning JStar sales, but who were also concerned that other NATO member states should reduce reliance on US surveillance assets. US representatives envisioned a similar procurement process to the 1970's AWACs procurement, where an 'off-the-shelf' solution was decided and procured in two years.[664] However, other member state objectives included access to the advanced US radar and aviation technology that the AGS Programme represented. They wanted the NATO collaborative procurement to fund development of a similar ISR capability by European

663. Personal Interview with Robert Bell

664. Telephone Interview with Clarence Juhl

defence industries. This led to bureaucratic politics in the decision-making where member states 'pulled and hauled' the AGS proposals to meet their different objectives. NATO bureaucracy and decision-making processes facilitated these dynamics, and are explained below. This section is divided into three parts, the first considers the security and organisation context; the second, considers the adoption of the MMR; the third, the initial proposal for a JStar AGS solution.

Security and Organisation Context

Three factors in the Western security context drove the early stages of the AGS procurement. First, NATO's involvement in expeditionary warfare and peacekeeping initiatives, such as the first Gulf War and conflicts in the former Yugoslavia; second, the gap between the US and European defence capabilities, particularly regarding surveillance assets; and third, NATO seeking contemporary relevance after the end of the Cold War. Thus the security concerns of NATO member states and the lack of European defence investment framed arguments for the AGS Programme by its main proponents: US officials and NATO IS.

Effective use of ISR capabilities was demonstrated in the first Gulf War.[665] Later NATO coalition experiences in the former Yugoslavia and Kosovo, where European forces were reliant on the US for ISR assets, also demonstrated the need for the capability.[666] Lord Robertson underlined this in a 2002 speech, when he noted that the difference in transatlantic capabilities meant that the US were shouldering most of the

665. GOURE, D. 2013. *Global Precision Strike*, Lexington Institute.

666. SCHAKE, K. 2002. Constructive Duplication. *Reducing EU reliance on US military assets, London: Centre for European Reform*.

costs and risks in the Kosovo and Afghanistan campaigns.[667] John Young, former Under Secretary of State for Defence, also commented that the US government particularly supported NATO's AGS procurement to relieve the use of US assets during these multinational operations.[668] Thus the collaborative procurement of the AGS capability was ideal for Western Allies to acquire surveillance assets in a cost effective way.

Member states were also keen to support the NATO AGS Programme to gain contracts for their defence industries. This included the US, the primary funder and industrial beneficiary of the Programme as the JStars production line was facing closure.[669] European defence industries had been suffering from the post Cold War 'peace dividend'[670] and the NATO acquisition was viewed as an opportunity to gain contracts and access to US technology.[671]

Alongside this calculus, Western allies, and especially Germany, were inspired to acquire surveillance capability in part by the US military culture of RMA with its

667. ROBERTSON, L. 2002c. Remarks by NATO Secretary General, Lord Robertson at the GKN Farnborough Dinner, RAC Club; 25 Jul. 2002.

668. Telephone Interview with John Young

669. PENGELLEY, R., SWEETMAN, B. & VALPOLINI, P. 1996. NATO Weighs Options for Airborne Battlefield Surveillance. *International Defence Review*. p.41; CHAO, P. 2004. NATO AGS - Finally Ready to Fly? Washington: Centre for Strategic and International Studies. p.3

670. VALÁŠEK, T. 2011. *Surviving Austerity: The case for a new approach to EU military collaboration*, Centre for European Reform.

671. Telephone Interview with Clarence Juhl

emphasis on information and intelligence.[672] The AGS capability was intrinsic to this approach to warfare, and while the Programme was not often framed in this context, there was a cultural element that encouraged procurement of the latest, sophisticated surveillance assets used in the RMA approach to operations. This cultural element meant that decision-makers were aligned in their approach to the procurement solutions through this reference to the RMA.

The AGS Programme was not formally linked to any NATO strategy or vision in its early stages. NATO's Strategic Concepts of 1991 and 1999 had included a requirement for an ISR capability, with no specific mention of the Programme.[673] The Strategic Concepts were reactive to the external security context and geared towards expeditionary and peacekeeping missions. NATO sought a post-Cold War role and the AGS Programme epitomised a sophisticated, shared capability that could be used in these missions. NATO's Secretary General Claes and the Defence Planning Committee and Nuclear Planning Group made reference to the need for an AGS capability to complement NATO's AWACs assets.[674] The first official NATO policy document that mentions the AGS Programme is the Defence Capabilities Initiative (DCI) procurement policy in 2000, followed by the Prague Capabilities Commitment (PCC) in 2002.[675]

672. LAIRD, R. F. & MEY, H. H. 1999. The Revolution in Military Affairs: Allied Perspectives. Washington DC: Institute for National Strategic Studies, National Defence University.; GANSLER, J. S. 2011. *Democracy's Arsenal: Creating a Twenty-First-Century Defense Industry*, MIT Press.

673. NATO 1999a. The Alliance's Strategic Concept. Washington D.C. Para 50 - 55

674. NATO 1994. Final Communiqué; Defence Planning Committee and Nuclear Planning Group; 15 Dec. 1994; Press Release M-DPC/NPG-2(94) 126. Brussels.;

675. NATO 1999b. Defence Capabilities Initiative approved by the Heads of State and Government participating in the Meeting of the North Atlantic Council. http://www.nato.int/cps/en/natohq/official_texts_27443.htm Accessed May 2017; http://www.nato.int/cps/en/natohq/topics_50087.htm Accessed May 2017

However, these policies were formed 10 years after the adoption of the AGS MMR. Thus, the member state actors initiating the procurement did not refer to a specific NATO strategy or policy; rather they were driven by their nation-centred, calculus objectives.

The adoption of AGS as a NATO MMR

President Clinton wrote to NATO Secretary General Worner about the JStars capability in 1992 and initiated the AGS Programme proposal.[676] At this point the JStars were still in prototype and had only one demonstration of use in the first Gulf War. Further, they needed some additional development and there was uncertainty surrounding future production of the capability.[677] The US viewed the successful procurement of the AWACs capability as a precedent for the AGS procurement and US expectations were that the AGS procurement could take a similar path.[678] The first AGS proposal was also based on the aircraft that were used by AWACs (Boeing 707s), so was further related to the capability.[679] Member states generated the MMR for an AGS capability, via the Military Committee, as the first step in NATO's procurement process. A former NATO official noted that the AGS MMR was written by US military officers based at NATO's Allied Command Operations Headquarters in SHAPE, with reference to the JStars.[680] This underlines US influence in the initiation of the Programme. The AGS Programme

676. Personal Interview with Robert Bell

677. VON KOSPOTH, E. 1999. The AGS Enigma-Reflections on a Fading Dream. *MILITARY TECHNOLOGY,* 23**,** 62-71.

678. Personal Interview with Erling Wang; Personal Interview with Rick Froh;

679. Personal Interview with Rick Froh

680. Ibid.

was noted in 1992[681] by the Defence Planning Committee (now folded into the NAC) and later gained North Atlantic Committee (NAC) approval as an 'essential' NATO requirement.[682]

Thus, NATO did not generate the AGS MMR internally with reference to strategic requirements. The MMR was adopted after the Gulf War, when the JStars were still in prototype. Although the utility of the capability had been demonstrated, there was no immediate need, and no evidence of a NATO strategy, that required the capability. It was only later, after the conflicts in the Balkans and Afghanistan, where the Allies began to rely on US surveillance assets, that the strategic need became more apparent. Therefore, the procurement procedure was initiated by the US for national objectives that included industrial imperatives, as they already had national surveillance assets.[683] European member states agreed to the proposal with the objectives of gaining access both to lucrative defence contracts and to US aviation and radar technology. The cultural driver of the US RMA is acknowledged,[684] but there is insufficient evidence to suggest that this was a primary driver for the procurement programme.

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681. 'This requirement was elevated to the highest, Heads of State level, in a DCI tasking. The operational need for an AGS capability is based on a military requirement confirmed by the NATO Military Authorities in 1992.'

BELL, R. 2002. "The Pursuit of Enhanced Defence Capabilities"

A luncheon address given by Robert G. Bell, NATO Assistant Secretary General for Defence Support at the European Defence Research & Development. Brussels.

682. NATO 1996a. Final Communiqué Meeting of the North Atlantic Council in Defence Ministers Session 18 Dec. 1996; Press Release (1996) 172; . Brussels.

683. Personal Interview with Robert Bell

684. Ibid.

Once the AGS MMR was generated it was referred to NATO IS for fulfilment. Therefore, although member states, and in particular the US, initially generated the AGS requirement, NATO IS coordinated proposals for solutions by working with industry and member state representatives. Here, NATO officials play an active part in the procurement process and become proponents of the solutions. It is important to note that the MMR remains in the NATO system until it is fulfilled. In essence, there is an organisational momentum in favour of the procurement once it is set in motion.

The initial proposal for the JStars capability

The AGS capability comprised three major aspects for fulfilment by industrial partners: the aviation platform, the radar solution, and the intelligence stations that analyse the radar imagery. NATO could agree to acquire either a US 'off-the-shelf' solution, or a more costly solution, developed by other member states. Clearly, if strategic, efficiency objectives were paramount, then an off-the-shelf US solution would be preferable. However, with *juste retour* objectives, European member states demanded a European industrial contribution. This necessarily involved a longer, more expensive development programme. A compromise of the US sharing technical knowledge that would alleviate time and development constraints would prove too difficult with US ITAR restrictions.[685]

Political problems also beset this proposal. Nominally, there were four systems being studied for the AGS Core capability during this period:[686] The US JStars; the French and

685. Phone Interview with Clarence Juhl

686. ROSS, J. 2002. The Coalition Aerial Surveillance and Reconnaissance (CAESAR) Approach to Enhancing the Interoperability of Coalition Ground Surveillance Systems. DTIC Document.

Italians each had low flying helicopter surveillance capabilities, HORIZON[687] and CRESO[688] respectively, although the CRESO was still in development;[689] finally, the UK was considering developing its own air ground surveillance capability with US company Raytheon, using Bombardier business jets and developing a new radar (ASTOR).[690] The JStar solution was an 'off-the-shelf' solution, where the development was largely complete.[691] The JStar capability centred on E-8A aircraft, which were Boeing 707s, adapted, by NG, to carry surveillance radars that could perform ground moving target indicator (GMTI), fixed target indicator, and synthetic aperture radar functions (SAR).[692] JStars send their data via secure data links to military analysis centres.[693] The US option was favoured as it fitted the AGS MMR and it would be ready for a 2001 Initial Operational Capacity (IOC) date set by SHAPE. Further, the US offered to forego sharing the development costs incurred on the capability to date.[694] As European member states would not agree to fund their portion of a JStars based solution without IP or technical transfer,[695] the French 'HORIZON' solution and the Italian 'CRESO' solution were also included in an initial JStars 'deliberate track' proposal by the

687. HORIZON: Helicoptere d'Observation Radar et d'Investigation our Zone

688. CRESO: Compleso Radar Eliportato Per La Sorveglianza

689. PENGELLEY, R., SWEETMAN, B. & VALPOLINI, P. 1996. NATO Weighs Options for Airborne Battlefield Surveillance. *International Defence Review*.

690. ASTOR: Airborne Stand-Off Radar

691. Development was not complete regarding to radar systems as discovered by European Member States after the JStar proposals had failed VON KOSPOTH, E. 1999. The AGS Enigma-Reflections on a Fading Dream. *MILITARY TECHNOLOGY,* 23**,** 62-71.

692. DEFENCE INDUSTRY DAILY 2011. Re-Engineering the E-8 JStars. *Defence Industry Daily*.

693. Ibid.

694. VON KOSPOTH, E. 1999. The AGS Enigma-Reflections on a Fading Dream. *MILITARY TECHNOLOGY,* 23**,** 62-71.

695. Personal Interview with Rick Froh

AGS Project office.[696] The UK also encouraged this 'deliberate track' version as they intended to contribute to the Programme via 'contributions in kind' and this gave them time to develop their ASTOR capability. The costs of the programme were unspecified in data gathered in this research, but would have been similar to the AWACs procurement of around $3bn.[697]

The JStars and their associated radar technology represented unique technology at this date, so member states were keen to get access to the capability. However, ITAR[698] restrictions prohibited exports of the radar technology by the US defence industry.[699] A former US official commented that the radar technology remained in 'black boxes'. Here, the Allies were being asked to buy something that they could not see, technology that they all wanted access to but were not being given.[700] NATO leaders such as Lord Robertson publicly referred to this highly problematic aspect of the procurement,[701] but US industrial imperatives regarding the AGS Programme could not overcome the ITAR restrictions.

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696. PENGELLEY, R., SWEETMAN, B. & VALPOLINI, P. 1996. NATO Weighs Options for Airborne Battlefield Surveillance. *International Defence Review*.

697. Ibid.

698. ITAR are the International Traffic in Arms Regulations
https://www.pmddtc.state.gov/regulations_laws/itar.html Accessed April 2017

699. Phone Interview with Clarence Juhl

700. Ibid.

701. NATO. 2000a. *Press Release: Acquisition policies dominate CNAD meeting; 24 Oct. 2000* [Online]. Brussels. Available: http://www.nato.int/cps/en/natohq/news_17973.htm?selectedLocale=en [Accessed November 2016].; ROBERTSON, L. 2002a. *Defence and Security in an Uncertain World; Keynote speech by NATO Secretary General of NATO, Lord Robertson, at Forum Europe, Brussels; 17 May. 2002,* Brussels.; ROBERTSON, L. 2002c. Remarks by NATO Secretary General, Lord Robertson at the GKN Farnborough Dinner, RAC Club; 25 Jul. 2002.;

The US also offered NATO a JStars 'fast track' option for six aircraft without the European industry development options.[702] This was cheaper for the European nations to accept without IP incentives. Despite the need for the capability becoming more apparent in the Balkans and Afghan conflicts, CNAD dropped this JSTAR Fast Track proposal in 1997.[703] It also rejected a subsequent 'Compromise Offer' by the US of a bargain sale of four aircraft with no improvements, straight from the production line.[704] There were many reasons for this. First, the inclusion of the European surveillance helicopter capabilities had not provided enough IP to obtain Programme support form all NATO nations. Second, the costs were seen as prohibitive, as this would have been the biggest programme that NATO had ever embarked upon. Funding agreement was required from the group of acquiring member states, and also from all NATO nations for joint funding of the infrastructure costs via the Resource Policy and Planning Board (RPPB). This committee could not agree to the JStar solution because of member state IP issues.[705] Third, Member States had problems justifying to their parliaments that they were going to spend money on specific aircraft where they were pursuing different policies domestically. For example Germany were in the process of decommissioning all their Boeing 707s (the aircraft that the JStar capability used). It was difficult for them to justify buying new 707s, when they were getting rid of their own aircraft.[706]

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702. BRIGGS, D. D. L. & EVERETT, M. R. R. 2001. Future DoD Airborne High Frequency Radar Needs/Resources. *Report of the Defence Science Board Task Force.* Washington DC. p.9

703. CHAO, P. 2004. NATO AGS - Finally Ready to Fly? Washington: Centre for Strategic and International Studies.; MILITARY TECHNOLOGY 1999. NATO AGS - The Endless Story. 3**,** 88-96. p.88

704. MILITARY TECHNOLOGY 1999. NATO AGS - The Endless Story. 3**,** 88-96. p.92

705. Phone Interview with Malcolm Fages

706. Personal Interview with Rick Froh

However, a significant obstacle was the US declining to release technical data.[707] Thus the JStars AGS solution did not meet member state IP objectives for retaining or gaining technical knowledge and winning defence contracts.

Although political considerations and juste retour were major factors in the failure of this proposal, this episode also revealed aspects of NATO organisation that were significant in the acquisition process. These include NATO's bureaucratic structure, its funding arrangements, and scrutiny of the organisation and culture.

NATO bureaucratic influence

Three aspects of NATO's procurement processes affected the AGS acquisition: the constancy of the AGS MMR in the NATO bureaucracy; the precedent of the AWACs procurement, which laid the ground for a 'multinational' format, allowing members' selective participation, and the concept of member state 'contributions in kind'; and finally, the structure of the NATO bureaucracy including the AGS Project Office and the Steering Committee (AGSSC), staffed by member state 'voluntary' contributions. While these factors enabled the procurement, they also delivered national 'industrial imperative' drivers and explained delays in decision-making.

First, the AGS MMR and 'Core Capability' status meant that the Programme was monitored via NATO's SOPs. These included important formal meetings such as the NATO Summits and CNAD Committee. These high profile conferences encouraged decisions and progress through political and diplomatic attention, which former NATO

707. CHAO, P. 2004. NATO AGS - Finally Ready to Fly? Washington: Centre for Strategic and International Studies.

officials called 'forcing mechanisms' for progress.[708] This meant that there was a relentless six monthly focus on the progress of the Programme. Useful bilateral meetings held at CNADs or NATO Summits, also gave opportunities for difficult aspects of the procurement to be agreed. At other times, debates, private conversations and member state negotiations also took place in small, informal sub groups, the AGS Steering Committee (AGSSC) and bilateral meetings within NATO.[709] These organisational SOPs help to explain the persistence of the Programme against the political and financial reticence of member states over the last 25 years.

Second, the 'multinational' format of the acquisition, involved a coalition of the willing which was persuaded to participate in the procurement. Member states were not compelled to participate, rather they made independent decisions depending on their interests. For example, Spain joined NATO after the AWACs acquisition and was allowed to opt out of contributing to this Programme.[710] Multinational format made decision-making easier with a smaller group of participating nations, rather than agreement by all 28 that would have been cumbersome.[711] The precedent of 'contribution in kind' was also set in the AWACs procurement, to which the UK and France contributed use of their national assets instead of direct funding.[712] In the AGS Programme, the UK announced that it would again be 'contributing in kind' with its proposed ASTOR project. The British were interested in delaying the AGS project so

708. Personal Interview with Robert Bell

709. Personal Interview with Erling Wang

710. Ibid.

711. Personal Interview with Jim Edge

712. TESSMER, A. L. 1988. *Politics of Compromise: NATO and AWACs,* Washington DC, National Defense University Press.; Personal Interview with Erling Wang

that they could develop ASTOR.[713] The 'multinational' format and 'contributions in kind' facilitated agreement and support for the Programme. However where nations opted out, there was less money for the acquisition. Significantly for timing aspects, NATO was powerless to move the procurement process forward without member state funding commitments. Here, member states withheld their financial participation until they satisfied their IP objectives. Moreover, because the assets were to be used by NATO, there was no 'national' urgency for the capability, especially as the US were providing the assets in the interim. This led to further delays and inertia in member state agreement to the AGS specification.

Third, aspects of the NATO bureaucratic structure affected the decision-making for the AGS procurement. These included the Project Office, the AGSSC, and NATO's leadership. NATO's Project Office for the procurement had various iterations during these initial stages of the procurement.[714] Decision-making for the Programme was coordinated through this office that reported to the AGSSC. These bodies were made up of member state 'voluntary' representatives rather than competitively recruited procurement professionals. This meant that the staff working on the procurement prioritised member state interests rather than timely procurement. Thus decision-making became 'pulled and hauled' by bureaucratic politics. Performance of the Office

713. Interview with Senior NATO Official; VON KOSPOTH, E. 1999. The AGS Enigma-Reflections on a Fading Dream. *MILITARY TECHNOLOGY,* 23**,** 62-71.

714. Variously referred to as the Embryonic Project Office (EPO); the Provisional Project Office (PPO); Supplemental Staff Committee (SSC); and finally from 2001 - 2009: the Alliance Ground Surveillance Staff Supplemental Office (AGS3)

during this period was criticised by former NATO officials for delays in decision-making.[715]

NATO is subject to little scrutiny and accountability regarding the efficiency of its procurement procedures. Limited literature considers the AGS procurement in these early stages. In his article '*The AGS Enigma - Reflections on a Fading Dream'*, Von Kospoth despairs at the organisation of the AGS project office,[716] which is based on national appointments rather than procurement expertise. Later Pierre Chao hints at the US agenda for defence sales.[717] But there is little sense of public accountability even though cost efficiencies were often emphasised by NATO and Member State officials in references to the AGS procurement.[718] However, any criticism was either in speeches with a narrow audience, or published in esoteric journals such as Military Technology and NATO's Nations and Partners for Peace. These had limited impact on public opinion and therefore encouraged little discipline, sensitivity or incentives within NATO to change their practices. The Defence Planning Committee and NAC were particularly involved in tracking the progress of the AGS Programme,[719] and made reference to the

715. VON KOSPOTH, E. 1999. The AGS Enigma-Reflections on a Fading Dream. *MILITARY TECHNOLOGY,* 23**,** 62-71.p.63; VON KOSPOTH, E. 2002. NATO AGS: Another Time..., Another Try. *MILITARY TECHNOLOGY,* 26**,** 31-35. p.32; Personal Interview with Rick Froh

716. VON KOSPOTH, E. 1999. The AGS Enigma-Reflections on a Fading Dream. *MILITARY TECHNOLOGY,* 23**,** 62-71.

717. CHAO, P. 2004. NATO AGS - Finally Ready to Fly? Washington: Centre for Strategic and International Studies.

718. COLSTON, J. 2004. Marrying capabilities to commitments; John Colston examines how the Alliance is improving its military capabilities to meet the demands of its ever-increasing operations. . *NATO Review*.

719. The Defence Planning Committee's responsibilities are now performed by the NAC: http://www.nato.int/cps/en/natohq/topics_49201.htm Accessed April 2017

efficiencies of armaments cooperation regarding the AGS.[720] However, member state decision-making that rejected the final US low cost proposals, demonstrated that cost efficiencies were clearly not the priority for this initial, unsuccessful JStar proposal.

To conclude, the initial stages of the AGS procurement process were superficially driven by strategic ISR requirements for expeditionary military campaigns, linked to the imperative to lessen the gaps between transatlantic defence capabilities. The US demonstrated enhanced drive for the Programme, compared to other member states, as they had a semi-developed capability that was facing production closure.[721] The JStar solution for the AGS Programme represented an opportunity for economic benefits for the US, but it also represented an opportunity for an off-the-shelf, low risk, surveillance solution for European member states. However evidence indicated that European member states prioritised the defence industry benefits of potential contracts and technical transfers. Additionally the AGS Project Office facilitated member state bureaucratic politics. This weakness in the NATO bureaucracy kept decision-making powers with national interests rather than impartial procurement professionals.

The study found that these early AGS procurement proposals were reactive to US drivers rather than being part of an overall long-term strategy for NATO capability. Therefore the Programme lacked the political support of member states who recognised

720. NATO 1995. Final communiqué Issued by the Defence Planning Committee and the Nuclear Planning Group of the North Atlantic Treaty Organisation in Ministerial sessions in Brussels on 29th November. Brussels.; NATO 1996a. Final Communiqué Meeting of the North Atlantic Council in Defence Ministers Session 18 Dec. 1996; Press Release (1996) 172; . Brussels.

721. CHAO, P. 2004. NATO AGS - Finally Ready to Fly? Washington: Centre for Strategic and International Studies.

that the US, rather than NATO strategy, was initiating the procurement and gaining industrial benefits. Thus calculus driven, bureaucratic politics are prevalent in the decision-making with the 'pulling and hauling' of member state preferences inhibiting procurement. However, while NATO was weak, it was an essential actor in eventual fulfilment of the Programme. Once the decision was made for the AGS requirement as an MMR, NATO's bureaucratic operating procedures meant that the wheels of the procurement process kept turning. As will be seen, SOPs were a major factor in seeing the Programme through to the Contract stage.

Section 2: Mixed Fleet Proposal, Global Hawk Proposal (1999 - 2008)

After the unsuccessful JStar proposal, the AGS Project Office continued to work with NG and their industrial partners to provide a solution to fulfil the MMR for an AGS Core Capability. This section considers drivers that kept the AGS Programme alive, two subsequent proposals for the AGS solution, and the final commitment by NATO member states to the Programme. The second AGS proposal for a 'Mixed Fleet' solution envisaged some development by European industry to develop a platform solution of manned Airbus 321s (to be produced in Europe) and unmanned Global Hawks (to be produced by NG). This proposal attempted to meet European member state technical and industrial imperatives that included the development of their own radar system, rather than using the US radar solution. However, the Mixed Fleet proposal failed due to the high costs this entailed.

The section also considers the evolution and drivers of the final 'off-the-shelf', Global Hawk Proposal. This was a US, sole source solution with NG as Prime Contractor. It involved little development and used US radar MP RTIPs system. The Global Hawk solution was efficient concerning time and cost, compared to the Mixed Fleet solution, but it limited European IP to the provision of ground stations. The study concludes that industrial imperatives were present in the final solution because European member states provided these ground stations. An important factor for the Global Hawk choice was the German interest in the capability and NG seeking further sales of this aircraft.[722] Finally, although the Global Hawks solution was the most cost efficient of the three former proposals, there were some limitations with the *capability* that may have made alternative solutions preferable. Here the study found additional, cultural drivers of prestige and aspiration influenced and drove decision-making.

During this episode evidence that cultural motives of NATO multilateralism and solidarity were present when new member states participated in the Programme, after the expansion of NATO in 2004. The commitment of these new member states gave the AGS Programme essential political weight to proceed to the Programme Memorandum of Understanding (PMOU) stage. Further, the AGS Programme began to be framed in a 'civil military' strategic culture. The section begins by considering additional security context influences during this period. As mentioned, an important factor in the organisation context was the tenacious efforts of the AGS Project office working with NG, and other industrial partners, to produce revised Programme proposals for member state approval. Motivations for NATO staff behaviour include organisation survival but also NATO cultural SOPs.

722. Phone Interview with Bob Zeiser and Matt Copija

Security and Organisation context

Three factors in the Western security context affected the narrative around the AGS Procurement programme during this period. First, the 9/11 terrorist attack and subsequent Iraqi and Afghan campaigns heightened the strategic need for European surveillance assets; second, evolving civil security narratives that referred to threats of terrorism, illegal migration and cross border crime justified alternative applications for the AGS capability, such as patrolling the Mediterranean;[723] and third, the expansion of NATO following the collapse of the USSR. While transatlantic ISR capability gaps continued to generate strategic logics for the AGS Programme, a new security narrative became prevalent in member state arguments during this period. It included security concerns for terrorism, illegal migration and cross border crime. NATO officials such as Secretary General Lord Robertson, framed the need for the AGS within this post 9/11 narrative, insisting that political concerns for work division of the AGS programme had to be downplayed in the bigger context of an anti terrorism effort.[724] Other senior NATO bodies, such as CNAD, also referred to the AGS Programme as equipping NATO for the fight against terrorism.[725] These threats were more proximate than expeditionary warfare requirements and were now at the forefront of Western security concerns. Other civil military roles such as international border monitoring, or civil

723. NATO'S NATIONS AND PARTNERS FOR PEACE 2006. AGS-Industries ready for the Programme, Interview with Mr Larry Harrell Managing Director of AGS Industries GmbH. *Nato's Nations and Partners for Peace,* iv.; https://www.youtube.com/watch?v=KkzFgoytDb8 accessed January 2017

724. ROBERTSON, L. 2002b. "NATO And The Challenge Of Terrorism: Reflections On The Way Forward" Speech by NATO Secretary General Lord Robertson at The Dutch Group Of Liberal International; 07 Mar. 2002.; NATO 2002c. Press Release: National Armaments Directors hold biannual meeting; 16 Apr. 2002.

725. NATO 2002c. Press Release: National Armaments Directors hold biannual meeting; 16 Apr. 2002.

disaster aid began to be mentioned and associated with AGS, especially by NG and member state politicians, who wanted to justify the Programme to their constituencies.[726] References to the transatlantic gaps in assets also continued, with a renewed emphasis in NATO to address these deficiencies. Lord Robertson, in particular, prioritised collaborative procurement, his mantra being 'capabilities, capabilities, capabilities.'[727] This was supported by other senior NATO staff such as Robert Bell, who often referred to the AGS procurement in his speeches.[728]

A significant event for the AGS Programme in this period was the expansion of NATO. Seven new members joined NATO in 2004 (Bulgaria, Slovenia, Slovakia, Estonia, Latvia, Lithuania, and Romania), following other new Member States who had joined in 1999 (the Czech Republic, Hungary and Poland). Many of these member states participated in the Programme, and while they were not big contributors to the procurement financially, as a decision-making block in the Consensus system, they were a significant contribution for political support to propel the Programme forward. A US diplomatic cable notes that Germany would only sign the PMOU in 2009 once critical mass was reached.[729] Drivers for their participation would have included multilateral

726. NATO'S NATIONS AND PARTNERS FOR PEACE 2006. AGS-Industries ready for the Programme, Interview with Mr Larry Harrell Managing Director of AGS Industries GmbH. *Nato's Nations and Partners for Peace,* iv.; https://www.youtube.com/watch?v=KkzFgoytDb8 accessed January 2017

727. Personal Interview with Lord Robertson;

728. BELL, R. 2002. "The Pursuit of Enhanced Defence Capabilities"
A luncheon address given by Robert G. Bell, NATO Assistant Secretary General for Defence Support at the European Defence Research & Development. Brussels.; BELL, R. 2005. NATO's Transformation Score Card. *NATO Review*.

729. US DIPLOMATIC CABLE 2009a. Cable: North Atlantic Council Meeting, May 27, 2009. Wikileaks.

symbolism, and alliance with the US oriented project. The commitment of these new member states revitalised cultural, ideational drivers for NATO solidarity that appeared absent in older member states.[730] They could also contribute to the procurement from a small economy to gain access to sophisticated ISR assets and gain US approbation.[731]

Additional collegiate and multilateral drivers that generated critical mass and political will for the Programme came from member states. Multinational programme participation involves relationships and commitment between member states. This engenders a sense of obligation to the acquisition that would not be found in national defence acquisitions. Here member states encouraged each other to join the AGS Programme and momentum came from the participation of others. An example is found in a US diplomatic cable from The Hague that notes that despite a 'stagnant economy', a long term Dutch commitment to AGS was possible.[732] An NAC meeting report cable refers to member states such as Denmark, Estonia, Germany and Italy joining the US to encourage other member states to sign the PMOU during the Spring CNAD meeting in 2009.[733] Later diplomatic cables about the Dutch withdrawal from the AGS Programme[734] reported that the Dutch Chief of Defence Staff (CHoD) was "ashamed" of

730. Peraonsl Interview with Erling Wang; Phone interview with Matt Copija and Bob Zeiser

731. BELL, R. 2002. "The Pursuit of Enhanced Defence Capabilities"
A luncheon address given by Robert G. Bell, NATO Assistant Secretary General for Defence Support at the European Defence Research & Development. Brussels.; Personal Interview with Erling Wang; Phone interview with Matt Copija and Bob Zeiser

732. US DIPLOMATIC CABLE 2003. Cable: The Netherlands 2004 Report to Congress on Allied Contributions to the Common Defense. Wikileaks.

733. US DIPLOMATIC CABLE 2009a. Cable: North Atlantic Council Meeting, May 27, 2009. Wikileaks.

734. US DIPLOMATIC CABLE 2007b. NETHERLANDS/JSF/AFGHANISTAN: POSITIVE ON JSF; OTHER ISSUES LOOMING. Wikileaks.

his government's behaviour. Another NAGSMA official suggests that Germany stayed in the Programme after the failure of the Mixed Fleet proposal and the reduction of its related work share, out of solidarity and its relationship to its industrial partners, as the Programme would definitely not have continued without its support.[735] International programmes often had protected funding over and above domestic programmes due to these obligations that had the character of diplomatic commitments.[736] While this driver of diplomatic obligation did not initiate the procurement, it was certainly an aspect of support for the Programme, being a manifestation of the multilateral symbolic driver.

During this period, NATO staff and NG industry tenaciously maintained momentum for the Programme, and were responsible for generating additional AGS Proposals. NG had a team of five who worked with the NATO AGS project office, and also with European industry to form partnerships to fulfil the AGS MMR.[737] Former NG personnel claim that corporate investment amounted to around $100 million over the procurement period. This investment of NG provides evidence of the symbolic, cultural driver concerning the prestige of the contract with its NATO association.[738] NG also had calculus drivers of gaining Prime Contracting experience, where the company had little expertise,[739] and hope of future national contracts. After the failure of the Mixed Fleet, NATO prevented the Programme from failing due to the persistence of the MMR. The organisation also provided forums and facilitated the progress of the procurement at crucial times, such Lord Robertson's ad hoc meeting in 2001 before the Mixed Fleet

735. Personal Interview with Jim Edge

736. Personal Interview with Otfried Wohlleben

737. Phone Interview with Bob Zeiser

738. Personal Interview with Robert Bell; Phone Interview with 001

739. Personal Interview with Jim Hursch

agreement. NATO also encouraged member state focus on capability enhancement and collaborative procurement with procurement initiatives such as the Defence Capabilities Initiative (DCI) and the Prague Capabilities Commitment (PCC) that referred to the AGS programme in policy documents.[740] These provided a framework for monitoring the progress of the AGS Programme, for example via NATO Parliamentary Assembly Reports to the Science and Technology Committee, regarding PCC implementation.[741] Here, NAC and CNAD could legitimately place pressure on member states at summits,[742] such as the Istanbul Summit. However despite these efforts, the data does not sufficiently demonstrate that without this pressure, the procurement would not have take place.

Mixed Fleet Proposal

Two events provide evidence for drivers behind the eventual AGS solution and commitment to the Programme and are examined in this section. First, the Mixed Fleet proposal, which was considered from 1999 - 2004; and second, the successful Global Hawk proposal. These events are analysed for evidence of contextual factors, but also for organisation factors that affected actor decisions.

740. NATO 2002b. Prague Capabilities Commitment (PCC). Brussels: NATO.; NATO 2001. Statement on the Defence Capabilities Initiative; Issued at the Meeting of the North Atlantic Council in Defence Ministers Session held in Brussels; Press Release M-NAC-D-1(2001) 089' Issued on 07 Jun. 2001.

741. SHIMKUS, J. 2004. 160 DSCTC 04 E - ALLIANCE-WIDE PROGRESS ON MEETING THE PRAGUE CAPABILITY COMMITMENTS. Brussels: NATO Parliamentary Assembly.; SHIMKUS, J. 2005. PROGRESS ON THE PRAGUE CAPABILITIES COMMITMENT. Brussels: NATO Parliamentary Assembly.

742. NATO 2004a. Istanbul Summit Communiqué Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council; Press Release (2004) 096; Issued on 28 Jun. 2004.

Drivers for the Programme continued included the AGS MMR, US and European industrial interests, and the tenacity of NATO staff, the AGS project office, and NG personnel in proposing AGS solutions and maintaining interest in the Programme. Delays due to bureaucratic politics of member states continued to plague the AGS acquisition and gave rise to comments on the obvious inefficiencies in the decision-making process.[743] Leading figures, such as Secretary General Jaap de Hoop Scheffer, expressed frustration at the process,[744] making overt reference to the lengthy AGS procurement.[745] Debates over the JStars proposal had taken six years, and discussions over the Mixed Fleet solution took another nine years before they were discarded. Here, persistence of NATO personnel such as Lord Robertson, Robert Bell, and Peter Flory, the Assistant Secretary General (ASG) DID,[746] ensured that the Programme continued to progress towards a PMOU. Diplomatic cables from NAC meetings and other NATO statements provide evidence of staff efforts for the process, constantly referring to open issues, such as IP and selection of the MOB, as well as NATO funding for in-service support and infrastructure costs.[747]

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743. BELL, R. 2002. "The Pursuit of Enhanced Defence Capabilities"
A luncheon address given by Robert G. Bell, NATO Assistant Secretary General for Defence Support at the European Defence Research & Development. Brussels.; BELL, R. 2005. NATO's Transformation Score Card. *NATO Review*.

744. DE HOOP SCHEFFER, J. 2008. Speech by NATO Secretary General Jaap de Hoop Scheffer at the High-level seminar on relations between the European Union and NATO; 07 Jul. 2008 - 07 Jul. 2008. http://www.nato.int/cps/en/natohq/opinions_7879.htm?selectedLocale=en.

745. Ibid.

746. ASG DID: Assistant Secretary General, Defence Investment Division

747. NATO 2008a. Cable: North Atlantic Council Meeting, November 21, 2008. Wikileaks., NATO 2009a. CNAD advances on capability requirements; 30 Apr. 2009 –. Brussels.; NATO 2008b. CNAD advances on key capability requirements; 21 Oct. 2008 - 22 Oct. 2008. Brussels.; NATO 2008c. Opening statement by NATO Secretary General Jaap de Hoop Scheffer at Informal meeting of NATO Defence Ministers with Invitees with non-NATO ISAF contributing nations; 09 Oct. 2008. Brussels.

The Mixed Fleet proposal illustrated how technical and industrial imperatives incurred delays and distracted member states from finding an efficient AGS solution. It revealed that the bureaucratic politics in NATO's decision-making processes resulted in an expensive, compromised solution that was never going to be accepted on cost grounds. While the proposals met with IP and political support they did not meet the cost requirements of member states. It also demonstrates how NATO, despite its inability to limit bureaucratic politics, encouraged and urged the Programme forward, either by leadership or by its SOPs of its CNAD meetings and Summits.

From 1998, after the failed JStar proposal, it seemed that European member states were determined to supply part of the AGS Programme, rather than agree to a single source US solution. ISR was an area where the US maintained technical supremacy, and where these member states wanted to compete at some level.[748] This would involve a development programme because European member states did not have their own radar technology, and the US was loath to hand over its technology.[749] The AGS Programme had three aspects under consideration: the provision of a radar capability, the platform solutions, and intelligence analysis stations.

The radar solutions were a major aspect of the technical transfer in the AGS Programme. CNAD approved funding for Concept Definition studies for two radar

748. VON KOSPOTH, E. 2002. NATO AGS: Another Time..., Another Try. *MILITARY TECHNOLOGY,* 26**,** 31-35. p.33

749. BIALOS, J. P. & KOEHL, S. L. 2004. Transatlantic Industrial Cooperation as a Tool for Transformation: A Case of Compelling Logic, But Limited Short-Term Prospects. *Transatlantic Transformations: Equipping NATO for the 21st Century.* p.159

solutions in 1998. First, the US/European consortium of NATO Transatlantic Advanced Radar Programme (NATAR),[750] which included the US Multi Platform Radar Technology Insertion Programme (MP-RTIP) radar. Second, the European consortium Standoff Surveillance Target Acquisition Radar (SOSTAR).[751] The first proposal was an extension of the proposed JStar radar system, which could now be used with other platforms, including unmanned platforms such as NG's Global Hawks.[752] The second proposal came from European member states and was accused of causing a 'first class tsunami' for the AGS Project Office.[753] It was launched for the specific purpose of gaining European expertise in producing ISR assets.[754] The US did not react positively to this and threatened to withdraw support for the AGS Programme in October 1998 unless some decisions were made to progress the project.[755]

In 2000, the two studies for a radar solution evolved into a 2-year competition, authorised by CNAD. A former NATO official commented that the competition was doomed from the start, as due to NATO's principal of 'Consensus' decision-making where the two teams were bound to veto each other when the choice for radar was made.[756] A breakthrough was achieved by the US offering two concessions. First they offered the German contractor, EADS, technical participation in its RTIP. Until this point RTIP had been run as a strictly 'black' programme.[757] This gesture by the US was

750. This was backed by the US, Belgium, Canada, Denmark, Luxembourg and Norway.

751. This was backed by France, Germany, Italy, the Netherlands and Spain

752. JANE'S DEFENCE WEEKLY 2001. Bid to Press forward with NATO AGS programme.

753. MILITARY TECHNOLOGY 1999. NATO AGS - The Endless Story. 3**,** 88-96. p.93

754. Ibid. p.93

755. Ibid. p.96

756. Personal Interview with Rick Froh

757. JANE'S DEFENCE WEEKLY 2001. Bid to Press forward with NATO AGS programme.

important to gain agreement to the RTIP radar and also evidence of the close relationship with Germany. Second, they proposed to merge the two radar solutions into a solution called the TCAR[758] radar.[759] This resulted in the National Armaments Directors (NADs) of France, Germany, Italy, Netherlands, Spain and the US signing a 'Statement of Intent' just before the Prague Summit in 2002.[760] This episode illustrates the lack of urgency felt by member states towards the AGS Programme and undermines the military requirements for the capability. Rather it underlines the importance of IP for member states.

The competing platform solutions were the 'Transatlantic Industrial Proposed' solution (TIPS),[761] using A321s and Global Hawks; and the 'Cooperative Transatlantic AGS' Solution (CTAS), which was based on the UK ASTOR capability using Bombardier business jets.[762] The CTAS proposal was unsolicited and would have caused some delay due to development considerations.[763] The intelligence analysis station solutions varied with the manned and unmanned platforms. With the larger manned platforms, such as the Boeing 707s or Airbus 321s, the analysis could take place in the aircraft. The Airbus 321s were seen as an upgrade to the dated 707 aircraft and would have been

758. TCAR: Transatlantic Cooperative AGS Radar

759. CALHA, J. M. 2003. 147 DSCTC 03 E - REFORM OF NATO COMMAND STRUCTURE AND THE NATO RESPONSE FORCE. Brussels: NATO Parliamentary Assembly.

760. NATO 2002a. NATO AGS radar cooperation statement of intent; Press Release (2002) 136; Issued on 21 Nov. 2002.

761. NATO 2004b. NATO takes major step forward towards putting Eyes in the Sky; Press Release (2004)063 063; Issued on 16 Apr. 2004. Brussels.

762. VON KOSPOTH, E. 2004. Alliance Ground Surveillance Programme (AGS) - Questions Ahead. *Military Technology,* 2.

763. CALHA, J. M. 2003. 147 DSCTC 03 E - REFORM OF NATO COMMAND STRUCTURE AND THE NATO RESPONSE FORCE. Brussels: NATO Parliamentary Assembly.

a like for like replacement to the JStars capability, which allowed battlefield management as well as ISR from the air.[764] However, at this stage the Germans in particular, began to be interested in unmanned options in their domestic policy. They were enthusiastic to evolve the AGS mission towards an ISR only platform such as the Global Hawks.[765] These aircraft could be used for civil military applications which fed into a Western 'community of values' security agenda.

NATO leadership was very supportive of the progress of the AGS procurement during this episode, with influential figures such as Secretary General Lord Robertson, who was focussed on capabilities as a priority, and Robert Bell, a distinguished defence diplomat who was Assistant Secretary General (ASG) for Defence Support. These officials were unable to deliver the AGS Programme, but in this period they argued forcefully for the capability and generated momentum for the acquisition. Lord Robertson arrived in 1999, and agreed that the strategic reasons for the Programme were sound due to operational pressures and over reliance on American assets.[766] Robert Bell described Lord Robertson as 'very hands on, very savvy negotiator, a bargainer' who prioritised the Programme and raised the subject at every opportunity.[767] In 2001, Lord Robertson announced a 'Reinforced NAC' meeting with the AGS Programme as its main agenda item.[768] This meeting called for properly paid and recruited Project Staff for the AGS office (which did not materialise), and reaffirmed NATO member states'

764. Phone Interview with Bob Zeiser and Matt Copija

765. Ibid.

766. Personal Interview with Lord Robertson

767. Personal Interview with Robert Bell

768. VON KOSPOTH, E. 2002. NATO AGS: Another Time..., Another Try. *MILITARY TECHNOLOGY,* 26**,** 31-35.

commitment to the Programme.[769] Further NATO conferences were used as targets to drive momentum for progress, for example agreement on the radar aspect of the AGS programme was announced before the Prague Summit in 2002.[770]

In April 2004, CNAD endorsed the NG led, TIPS concept platform and the TCAR radar solution.[771] The CTAS platform was discounted for technical reasons, although the US political backing for TIPS is likely to have been a major factor.[772] Crucially no formal agreement for funding had been agreed or the final costs revealed. The Programme was to be the largest in NATO history with a potential cost ceiling of over $5bn.[773] The project required a considerable amount of development but it achieved the European industrial objectives for technical acquisition. However, the costs of the programme proved to be prohibitive. By 2005 the TIPs proposal had shrunk from 12 Airbus 321s to 5-6 A321s and 7 Global Hawks. This still represented a hefty $5.2bn acquisition.[774] Apart from the costs, a major delay was the technical transfer agreements required from the US. In the TIPS consortia, the TCAR radar systems would be developed by six

769. DEPARTMENT OF DEFENSE 2010. Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Office of Secretary Of Defense. Washington. p.3

770. NATO 2002a. NATO AGS radar cooperation statement of intent; Press Release (2002) 136; Issued on 21 Nov. 2002.

771. JANE'S DEFENCE INDUSTRY 2004. NATO - TIPS Industry wins AGS vote.; KONGSBERG 2004. TIPS, The Transatlantic Solution for NATO AGS, Norway Industry Day. Norway.

772. VON KOSPOTH, E. 2003. AGS (airborne ground surveillance) has a long and tormented history. *NATO's Nations and Partners for Peace,* 48**,** 140-146.

773. ARNADOTTIR, R. E. 2008. CURRENT AND FUTURE CAPABILITY PRIORITIES FOR THE ATLANTIC ALLIANCE. Brussels: NATO Parliamentary Assembly, SUB-COMMITTEE ON TRANSATLANTIC DEFENCE AND SECURITY CO-OPERATION. para.40

774. DEFENSE INDUSTRY DAILY. 2005. NATO Signs Initial $26m Contract for AGS 'Eye in the Sky'. Available: http://www.defenseindustrydaily.com/nato-signs-initial-26m-contract-for-ags-eye-in-the-sky-0450/ [Accessed 06 January 2015].

countries, thus providing European IP, but necessitating US technical transfer of their radar technology.[775] This was still problematic for the US. With technical transfer issues and development for the radar becoming problematic and costly, a decision was made for the Global Hawk to be equipped with the single source, US MP-RTIPs radar rather than the TCAR solution.[776] This was a blow for the European effort especially for IP concerns and technical transfer, but was important for cost and risk reduction.[777] It facilitated member state agreement in principle, but it significantly lowered incentives for participation in the Programme. For example, Spain was funding its planned participation via a Research and Development budget rather than Defence Department budgets, but without TCAR this funding fell away.[778]

The Mixed Fleet Request for Proposal (RfP) actually moved into negotiation phase in 2006,[779] but the financial implications became clear when the PMOU, a Design and Development Supplement, and Radar Implementing supplement were released for final signature and staffing approval.[780] A subsequent US Department of Defense (DoD) document charts the demise of the Proposal in July 2007:[781]

775. NATO 2005b. Signature of the Alliance Ground Surveillance (AGS) contract; Press Release (2005) 054; Issued on 27 Apr. 2005.

776. NATO'S NATIONS AND PARTNERS FOR PEACE 2006. AGS-Industries ready for the Programme, Interview with Mr Larry Harrell Managing Director of AGS Industries GmbH. *Nato's Nations and Partners for Peace,* iv.

777. Ibid.

778. Ibid.

779. NATO 2006a. *Missile defence and ground surveillance progress; 26 Oct. 2006,* Brussels.

780. DEPARTMENT OF DEFENSE 2010. Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Office of Secretary Of Defense. Washington. p.2

781. Ibid. p.2

'At an Extra-ordinary CSC[782] meeting, Canada, France, Germany, and The Netherlands indicated they could not support the Program of Record due to affordability. The CSC recommended ceasing work on the Program of Record in favor of a UAV only capability based on an Off-The-Shelf Global Hawk (OTS-GH) equipped with the U.S. Multi-Platform Radar Insertion Program (MP-RTIP) sensor. This capability was previously endorsed by the user, Supreme Headquarters Allied Command Europe (SHAPE).'[783]

The Mixed Fleet proposal had been driven by industry responding to member state requirements for technical transfer and IP, as well as continuing US industrial imperatives. This led to an expensive, development driven outcome. Although it was a solution that the Europeans could live with from an industrial point of view it was simply unaffordable. Further the US could not agree to reveal the technical details of the radar.[784] In order for the Programme to proceed, additional drivers were needed and/or the difficulties regarding cost and technical transfer needed to be reduced.

Global Hawk Proposal

Factors driving consensus for the AGS Global Hawk solution are considered below. The final solution entailed NG's unmanned Global Hawks, using the US MP RTIP radar, with European industrial partners providing the ground intelligence analysis stations. In

782. AGS Capability Steering Committee (CSC)

783. DEPARTMENT OF DEFENSE 2010. Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Office of Secretary Of Defense. Washington. p.2

784. BIALOS, J. P. & KOEHL, S. L. 2004. Transatlantic Industrial Cooperation as a Tool for Transformation: A Case of Compelling Logic, But Limited Short-Term Prospects. *Transatlantic Transformations: Equipping NATO for the 21st Century.* p.158-159

this choice, cost efficiency drivers overcame member state industrial imperatives. There were repercussions in that some member states (such as Spain and Turkey) no longer participated in the Programme, although industrial imperatives were somewhat met with European provision of the ground stations. The research found that, as Global Hawks were a unique, unmanned solution in the early 2000's, member state aspiration for this sophisticated asset included drivers of cultural prestige.[785] For many member states, NATO's AGS Programme presented an opportunity to gain access to these sophisticated assets at a lower cost that for a national programme.[786] This meant that shortcomings of the solution were overlooked. These included the appropriateness of the Global Hawk capability (detailed below), the inexperience of NG in managing international programmes, and the expensive provision of ground stations by European industry. These shortcomings were also overcome by US support, driven by industrial imperatives and lobbying efforts of NG.

Further, the lack of scrutiny of the acquisition process meant that negative aspects of the process were little mentioned by academics or the press. This facilitated inefficient symbolic drivers and industrial imperatives. Finally, a multilateral sense of obligation persisted. New member states had signed up to the Programme, but Germany had also persisted with the procurement, despite significant loss in IP. This reflected the high level of investment and the importance of German industrial partnership with NG.[787] NG had responded to German interest in unmanned solutions regarding a potential

785. Phone Interview with Malcolm Fages

786. Personal Interview with Erling Wang

787. Phone Interview with Bob Zeiser

national contract.[788] Officials commented that German commitment was essential for the Programme; if Germany had left the Programme there simply would not have been enough political traction to acquire the capability.[789]

In September 2007, NG and the AGS Project Office, AGS3, put forward the Global Hawk AGS solution.[790] As in previous proposals, IP considerations were important to gain political will for funding commitment at the PMOU stage. The revised proposal stated that:

> 'The AGS Core capability will consist of an air segment based on the U.S. Block 40 version of the RQ-4B Global Hawk high altitude, long endurance unmanned aerial vehicle (UAV) equipped with the state-of-the-art multi-platform radar technology insertion program (MP-RTIP) ground surveillance sensor. The ground segment, which will be developed by Canadian-European industry, will provide data to multiple deployed and non-deployed operational users and is foreseen as an interoperable interface between the AGS Core and a wide range of national and NATO Intelligence, Surveillance and Reconnaissance (ISR) systems.'[791]

This was immediately picked up in its October session by the CNAD who urged progress, noting that the capability was off-the-shelf and therefore low risk, as it

788. BUNDESTAG 2013. Minor interpellation tabled by Member of the Bundestag Andrej Hunko, other Members of the Bundestag, and the Left Party parliamentary group
German participation in NATO's Alliance Ground Surveillance Programme Bundestag printed paper 17/14018. Berlin.

789. Personal Interview with Jim Edge

790. DEPARTMENT OF DEFENSE 2010. Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Office of Secretary Of Defense. Washington. p.2

791. NATO 2009b. NATO's Allied Ground Surveillance programme signature finalised; Press Release (2009) 139. Brussels.

required little development. The Committee emphasised a contract signature target of 2008, with delivery for 2012.[792] AGS3 then worked with NG and CNAD to gain consensus for this revised, lower cost package.

Farrell stipulates that procurement of a certain capability may demonstrate a calculus, rational purpose if it: first, carries out a necessary mission; second, is capable of carrying out its mission; and third, if it is the most efficient equipment to carry out the mission.[793] If the capability does not fulfil these requirements then it can be concluded that the acquisition of the capability was driven by other non-strategic calculus or culture factors. First, although a military need was stipulated for the ISR capability in the 1990's, a lack of strategic urgency was clearly demonstrated in European member state attitudes to the AGS procurement for the first two proposals, which prioritised industrial imperatives over timeliness of the procurement.[794] The AGS acquisition was attractive to NATO on many fronts including role expansion into civil military roles. As noted by NAGSMA General Manager, Jim Edge:

> 'NATO is good at intelligence, moving information, understanding what is going on, making sure that the Nations are aware. NATO doesn't do kinetics very well. They are reluctant to do kinetics because 28 would have to say yes. All nations have an equal and similarly loud voice in any of those decisions. ISR capability like Global Hawk, 1) its not armed 2) it has instantaneous civil application. So NATO is going, 'yes that is really nice.'[795]

792. NATO 2007. October 2007 CNAD makes progress; 25 Oct. 2007 - 26 Oct. 2007.

793. FARRELL, T. 1997. *Weapons Without a Cause: The Politics of Weapons Acquisition in the United States*, St. Martin's Press. p.9

794. Personal Interview with Otfried Wohlleben and Colonel Volker Sammans

795. Personal Interview with Jim Edge

Thus proponents of the AGS programme rearticulated its mission into a civil military narrative, first reflecting an anti terrorism context and latterly to humanitarian 'community of values' context. These fitted the contemporary strategic culture. Further comments from the current General Manager of NAGSMA:

> 'we never talk just about military intelligence, surveillance reconnaissance gathering capability. We always talk about humanitarian capabilities, search and rescue for example, predictive imagery for example.... we have always reminded any audience that the NAC and Shape have the ability to answer from a pure good steward and good samaritan perspective a need with surveillance, reconnaissance capability. ..... It's a military aspect but it is being used for civil actions.'[796]

A former Chairman of NAGSMO also noted: 'So we sold this as civilian dimension, with natural catastrophes, pollution'.[797] These quotes show awareness that civil military missions were helpful in generating political will for the capability. It places AGS within the civil military and 'community of values' strategic cultures and lends it a cultural legitimacy. Thus NATO supports this role expansion and mentions these roles on its AGS website.[798] This discourse is used as a cultural tool for societal purposes rather than the military audience. Again the former Chairman commented 'my [military] units wouldn't like this'. But as the General Manager insists: 'it is a great magazine part, people see it as not only having military utility. Clearly there is a civil application for this system. Its sells well when I talk to members of parliament, because they recognise

796. Personal Interview with Jim Edge

797. Personal Interview with Erling Wang

798. https://www.nato.int/cps/en/natolive/topics_48892.htm Accessed December 2017

that they are buying potential dual use or multi-use type systems, certainly it has a capability.'[799]

Second, were the Global Hawks the most capable solution? The answer is 'probably', if one were looking for an unmanned solution in the early 2000's where NG was the only supplier of this cutting edge radar technology. At this time, the NATO AGS version of Global Hawks provided the most sophisticated military specification of surveillance.[800] A NG press release notes: 'The UAV is equipped with state-of-the-art, multi-mode, Multi-Platform Radar Technology Insertion Program (MP-RTIP) ground surveillance radar sensor, enhanced with an extensive suite of network-centric enabled Line-of-Sight (LOS) and Beyond-Line-of-Sight (BLOS) long-range, wide-band data links.' The sophistication meant that there were extensive surveillance capability that could be deployed in all visibility situations and provide real time 'concurrent terrestrial and maritime Ground Moving Target Indicator (GMTI) and Synthetic Aperture Radar (SAR) information in all-weather, day or night operations'.

At this time, European member states were interested in unmanned surveillance solutions and countries such as Britain, Germany and France were considering their own programmes.[801] A former NATO official commented: 'Others would have been happy to do the Airbus alone, ... But Germany had just decided to buy the EuroHawk.'

799. Personal Interview with Jim Edge

800. GRUMMAN, N. 2014. NATO AGS North Atlantic Treaty Organisation Alliance Ground Surveillance, The Height of ISR Knowledge. Marcom Melbourne, Florida.

801. SHIMKUS, J. 2004. 160 DSCTC 04 E - ALLIANCE-WIDE PROGRESS ON MEETING THE PRAGUE CAPABILITY COMMITMENTS. Brussels: NATO Parliamentary Assembly.

Therefore they could not politically justify a manned alternative in NATO.[802] However manned aircraft, and later UAV models such as NG's MQ-4C Triton,[803] have fewer limitations.

The Global Hawks were cutting edge technology, but not without complications.[804] They were a unique asset, developed as an Urgent Operational Capability, and were still in development when used during the Kosovo, Afghan and Iraq campaigns in the early 2000's.[805] The Global Hawk Block 40 model does not have 'sense and avoid' systems.[806] This is a safety mechanism and without it, Global Hawks cannot fly in the heavily restricted, densely used, air space over Europe. Therefore the aircraft may have to be based at quite some distance from potential targets, due to flight restrictions, which can negate its long endurance feature.

The Global Hawk has also been criticised as to its vulnerability in extreme weather conditions. The aircraft does not have an anti icing system and 'hot weather conditions

802. Personal Interview with Rick Froh

803. NORTHROP GRUMMAN. 2017. *MQ-4C Triton, Making the World's Oceans Smaller* [Online]. Available: http://www.northropgrumman.com/Capabilities/Triton/Pages/default.aspx [Accessed April 2017].

804. BRIGGS, D. D. L. & EVERETT, M. R. R. 2001. Future DoD Airborne High Frequency Radar Needs/Resources. *Report of the Defence Science Board Task Force.* Washington DC.

805. SIA, R. H. P. & COHEN, A. 2013. The Drone that Wouldn't Die: How a Defense Contractor Bested the Pentagon. *The Atlantic*.; Personal Interview with Andrew Tyler CEO NG Europe

806. http://foxtrotalpha.jalopnik.com/why-the-usafs-massive-10-billion-global-hawk-uav-was-w-1629932000 Accessed April 2017; BUNDESTAG 2013. Minor interpellation tabled by Member of the Bundestag Andrej Hunko, other Members of the Bundestag, and the Left Party parliamentary group German participation in NATO's Alliance Ground Surveillance Programme Bundestag printed paper 17/14018. Berlin.

present special challenges as well'.[807] Finally, Jack Nelson observes that the Global Hawk is 'basically defenceless' in contested environments.[808] He points to evidence that the USAF is looking to equip itself with a 'more survivable fleet'.

Thus NATO's AGS Programme has suffered from its long lead times. When technology advanced, it was impossible to alter the specification to the more sophisticated technical model, such as NG's Triton,[809] due to the politically fragile procurement process. Tritons were developed for the US Navy and addressed the problems outlined above. It is interesting to note that when Germany dropped its national Eurohawk programme in 2011, due to concerns with the capability - notably the inability to fly the aircraft in European airspace[810] - it placed an order for the MQ-4C Triton.[811] To conclude, member states were prepared to overlook the limitations of the capability in order to participate and have access to sophisticated assets,[812] to avoid a politically charged

807. NELSON, J. A. 2014. *Alliance Ground Surveillance and the Future of NATO's Smart Defense.* Naval Postgraduate School. p.38

808. Ibid. p.39

809. NORTHROP GRUMMAN. 2017. *MQ-4C Triton, Making the World's Oceans Smaller* [Online]. Available: http://www.northropgrumman.com/Capabilities/Triton/Pages/default.aspx [Accessed April 2017].

810. SHIMKUS, J. 2004. 160 DSCTC 04 E - ALLIANCE-WIDE PROGRESS ON MEETING THE PRAGUE CAPABILITY COMMITMENTS. Brussels: NATO Parliamentary Assembly.; BUNDESTAG 2013. Minor interpellation tabled by Member of the Bundestag Andrej Hunko, other Members of the Bundestag, and the Left Party parliamentary group

German participation in NATO's Alliance Ground Surveillance Programme Bundestag printed paper 17/14018. Berlin.

811. SIEBOLD, S. & SHALAL ESA, A. 2017. *Germany to buy Triton drone to replace canceled Euro Hawk-sources* [Online]. Available: http://www.reuters.com/article/us-germany-northrop-idUSKBN16E14D [Accessed April 2017].

812. Phone Interview with Malcolm Fages

change in specification, and under US pressure and multilateral obligations to fellow member states in the existing process.

Third, were the Block 40 Global Hawks the most cost efficient, rational choice for NATO's AGS ISR capability? Manned alternatives, discounted in the Mixed Fleet Proposal above, were more expensive to produce, and were less sophisticated and 'sexy'.[813] Pierre Chao favourably compares the costs of unmanned solutions to manned alternatives.[814] However, the Block 30 aircraft, an earlier model of Global Hawks used by USAF, had a number of problems that included high costs of production.[815] There is historic evidence of US domestic industrial imperatives overcoming concerns regarding costs and capability. The USAF had earmarked Global Hawks for cuts, but the Programme had Congressional support due to its significance for regional employment in California.[816] Press articles have described the lobbying activities of NG, particularly regarding the Block 30 Global Hawks.[817] Here, sales to the USAF were charged with being a 'technology push rather than a requirements pull'. The aircraft had huge cost overruns, but when the USAF tried to drop the aircraft from its budget in 2011,[818] the effort was defeated in Congress after lobbying efforts by NG. There are allegations of timely donations from NG employees to politicians in these relevant constituencies to

813. CHAO, P. 2004. NATO AGS - Finally Ready to Fly? Washington: Centre for Strategic and International Studies.;

814. Ibid. p.4

815. GERTLER, J. 2012. U.S. Unmanned Aerial Systems. Washington DC: Congressional Research Service.

816. DYER, G. 2013. US Drone Lobby's power points to revived military-industrial complex. *Financial Times*.

817. SIA, R. H. P. & COHEN, A. 2013. The Drone that Wouldn't Die: How a Defense Contractor Bested the Pentagon. *The Atlantic*.

818. Ibid.

enlist their support for the aircraft.[819] Various other tactics were also used to affect the debate. These included arguments regarding the economy and jobs in constituencies where NG's manufacturing was based, a 'Support Global Hawk' website, and distribution of fliers showing the broad support that the manufacturing of the aircraft gave to communities across the US.[820]

While no explicit evidence of lobbying is available regarding NATO's Global Hawk Block 40, the episode with the Block 30 revealed powerful support for Global Hawks. Similar narratives are found in press releases during the early stages of NATO's Global Hawk procurement detailing the number of extra US jobs that the AGS contract represented, clearly playing on the US State support.[821] Further, diplomatic cables reveal the US Embassy encouraging Department of Defence participation in the 2007 Paris Air Show and promotion of the Global Hawks and the AGS procurement.[822] Thus US industrial imperatives, while not entirely explaining the support for the AGS Programme, certainly were present, and were a reason why the US accepted paying a majority share of the Programme costs. This aspect, along with IP, gained European political will for the Programme. European member state provision of the ground stations added costs, but it met with IP demands and thus generated support despite the additional cost implications.

819. Ibid.; DYER, G. 2013. US Drone Lobby's power points to revived military-industrial complex. *Financial Times*.

820. SIA, R. H. P. & COHEN, A. 2013. The Drone that Wouldn't Die: How a Defense Contractor Bested the Pentagon. *The Atlantic*.

821. DEFENSE INDUSTRY DAILY. 2005. NATO Signs Initial $26m Contract for AGS 'Eye in the Sky'. Available: http://www.defenseindustrydaily.com/nato-signs-initial-26m-contract-for-ags-eye-in-the-sky-0450/ [Accessed 06 January 2015].

822. US DIPLOMATIC CABLE 2005. DOD Direct Participation in Trade Shows 2007. Wikileaks.

Thus the Global Hawk solution met cost demands compared to previous proposals. But on a standalone basis it needed the input of cultural drivers, and irrational European government member state IP drivers, to overcome the limitations of the capability. Cultural drivers for the Global Hawks included symbolic drivers of having access to a prestigious, state-of-the-art surveillance capability and multilateralism at this stage. The participation of seven new member states meant that 15 out of 28, supported and gave the Programme the critical mass that it needed for agreement in NATO member state driven committees, such as CNAD and the RPPB. As well as access to sophisticated ISR assets, these states also wanted to prove their credentials within NATO and particularly to the US. A former NATO official commented: 'why would Estonia, Latvia, Lithuania and all these small nations, very small contributions? Why would they be interested in this if there weren't kind of, they would get some goodwill out of it from their article 5 guarantors?.'[823] Further comments regarding their participation included: ' .....to say that 'I was part of the team that bought that system for NATO' is a political feather around the CNAD, around the NAC'.[824]

This section considered drivers for the successful Global Hawk proposal. There remain questions as to the usefulness of Global Hawks in bad weather, restricted European airspace or contested environments. Evidence suggests that calculus drivers to overcome these concerns were the lower costs of the Programme; US industrial interests; US funding the principal share of the acquisition; and European member state IP opportunities regarding the ground stations. These factors generated political will for

823. Personal Interview with Erling Wang

824. Personal Interview with Jim Edge

a US 'sole source' solution. However, cultural drivers were also necessary for the acceptance of the Global Hawks proposal. First, the articulation of civil military missions for the AGS capability aligned with European societal expectations for the provision of security under their civil military and community of values culture; second, the political weight of the Programme achieved by the participation of new member states for multilateral reasons; and finally aspirations for the prestigious nature of the capability compared to manned alternatives. The next section considers the signing of the PMOU and events concerning the implementation of the Contract.

Section 3: The AGS PMOU and the Contract (2009 - 2014)

This final section of the AGS Case study considers two major events, first, the commitment to the PMOU and second, finalising the AGS Contract terms (the Contract). The section considers drivers for the choice of sub contractors, securing NATO wide agreement to the infrastructure and logistical costs from the RPPB, and the final member state participation in the Programme. These stages represent the culmination of the AGS procurement process up until 2014 when the final participating member state, Poland, agreed to rejoin the Programme. Member states continued to dominate decision-making until they committed to the PMOU and to funding the AGS acquisition. After this, significant actors at the Contract stage were NAGSMA,[825] the NATO AGS procurement body, and NG, the Prime Contractor, who was responsible for coordinating subcontractors and IP. Drivers for the Contract conclusion included NATO and NG incentives to conclude the Contract after the lengthy lead-time; NG incentives were to realise the investment that they put into proposals for the Programme;

825. NATO AGS Management Agency

to de-risk their potential liability in the Contract; and to gain additional, national contracts from NATO member states, such as Germany. The research considered the balance of power between NAGSMA and NG in the Contract negotiations given the pricing and specification within the PMOU, industry desire for profit, desire for prestigious associations with NATO, but also negotiating leeway of the NAGSMA and NG teams. NAGSMA and NG had to overcome inter-industrial contractor tensions, particularly due to differences in transatlantic practices. These added complexity and difficulties to the progress and implementation of the Programme.

Security and Organisation Context

From 2008 to 2014 the Western security context demonstrated the continued lack of European ISR assets in NATO's Afghan operations and the 2011 Libyan intervention. There were also increased defence budget concerns following the 2008 global financial crisis. Cultural factors included Western expectation for the use of UAVs in civil security contexts, such as border security and disaster relief.[826] First, NATO was involved in expeditionary campaigns in Afghanistan and Libya during this period, which underlined the calculus need for European sourced surveillance assets.[827] References to these campaigns explicitly linked NATO's future roles to the AGS capability and therefore leant pressure for the procurement.[828] For example, Joseph Collins (Defense Department Acting Director on NATO policy) observed that success in Libya was

826. EDGE, J. 2014. AGS Briefing, The Alliance Ground Suveillance, A Transformational Capability for NATO. Brussels.; NORTHROP GRUMMAN 2011. Northrop Grumman submits Final Proposal for NATO Alliance Ground Surveillance. Florida.

827. BARRY, B. 2011. Libya's lessons. *Survival,* 53**,** 5-14., GILLI, A. 2012. Procurement Lessons from the War in Libya. RUSI Defence Systems.

828. http://www.nato.int/cps/en/natohq/news_87930.htm?selectedLocale=en Accessed April 2017;

dependent on the US ISR assets that NATO's AGS could have provided.[829] The military requirements, and gaps in European provision of surveillance assets, gave NATO and the US arguments to push forward the AGS PMOU. Second, the global financial crisis in 2008 affected defence budgets. The US had an especially bad crisis and Leon Panetta emphasised that future budget cuts at the Pentagon meant that the US would not always be able to fill gaps in European capabilities.[830] This increased the US drive for implementation of the AGS capability. However, European governments had difficulty in justifying the AGS Programme in their budgets at this time. For example in 2009 the Czech government asked for financial help from the US government to meet its AGS commitments.[831] Cost concerns often provided a useful foil for political issues. Denmark temporarily pulled out of the Programme in 2010 citing cost pressures (but subsequently rejoined in 2012 when their defence budgets had actually increased).[832] Canada also cited financial pressures when it left the Programme in 2012,[833] but actually disagreements over the use of NATO's AWACs in Afghan operations purportedly led to Canadian withdrawal from both the AWACs and AGS programmes.[834]

829. SEFFERS, G. I. 2012. Diplomacy Wins the Day for Alliance Ground Surveillance System. *Signal Magazine*.

830. ALEXANDER, D. & BRUNNSTROM, D. 2011. US Warns NATO over Defence Cuts. *Reuters*.

831. US DIPLOMATIC CABLE 2009b. Part II: Czech Comments on Furthering US Czech Strategic Cooperation; October 9, 2009. Wikileaks.

832. PAPIC, M. 2010. *NATO Critical of Danish Spending Cuts* [Online]. Wikileaks. Available: https://wikileaks.org/gifiles/docs/17/1781133_europe-digest-100623-marko-.html [Accessed].

833. PUGLIESE, D. 2012. Canada pulls out of NATO airborne surveillance programs to save $90m *National Post*.; SIRAK, M. C. 2013. NATO's New Eyes in the Sky. *Air Force Association*.

834. Personal Interview with 010

The AGS was increasingly framed as a capability for civil military, humanitarian missions, in a positive cultural light, during this period.[835] This met Western societal concerns for contemporary security issues that were proximate to their territory. Further, military 'drones' had bad press and so defence functions were played down to the public, and politicians wanted little public association with military applications of UAVs.[836] Official press releases from this time were calculated to enhance 'culturally positive' aspects of the Programme. Thus NG emphasised that the 'affordable, executable Programme' would perform all of NATO missions but explicitly mentioned 'border and maritime security, counter and anti terrorism, crisis management, peacekeeping and enforcement, and natural disaster relief'.[837] Robert Bell notes the dual use aspects with civil military missions that included 'Mediterranean migrant ops' alongside dealing with 'Russian challenges to the east'.[838]

Other AGS presentations emphasised the civil military aspects of the Programme, meeting member state preoccupation with humanitarian concerns and border control as seen in the slide below.[839] This civil military emphasis plays into societal expectations for contemporary provision of security. Although the AGS acquisition policy had largely been agreed at this point, this emphasis would have been influential in gaining member state agreement to the RPPB common funding for the AGS infrastructure costs.

835. MICHELL, S. 2012. NATO Alliance Ground Surveillance Surges Forward. *Defence Capability Programmes - Air*. London: RUSI.

836. Obama declined to be present at the signing of the AGS PMOU at the NATO Chicago Summit in 2012. Personal Interview with Robert Bell

837. NORTHROP GRUMMAN 2011. Northrop Grumman submits Final Proposal for NATO Alliance Ground Surveillance. Florida.

838. Personal Interview with Robert Bell

839. EDGE, J. 2016. AGS Briefing, Alliance Ground Surveillance, a Transformational Capability for NATO. Brussels.

Figure 6. EDGE, J. 2016. AGS Briefing, Alliance Ground Surveillance, a Transformational Capability for NATO. Brussels.

Finally, there were other organisation dynamics that drove progress towards the final PMOU terms and the Contract negotiation and closure. The fact that it had taken over 20 years to conclude the AGS acquisition raised questions over the role of NATO as a credible procurement agency.[840] NATO's IS played an important role in maintaining momentum towards the PMOU signature at the 2012 Summit in Chicago. Organisational survival concerns regarding the lengthy procurement process provided incentives to conclude the Programme. A former Chairman of NAGSMO noted the pressure to conclude the AGS procurement resulting from sheer embarrassment at the length of time that the process had taken.[841]

840. DE HOOP SCHEFFER, J. 2008. Speech by NATO Secretary General Jaap de Hoop Scheffer at the High-level seminar on relations between the European Union and NATO; 07 Jul. 2008 - 07 Jul. 2008. http://www.nato.int/cps/en/natohq/opinions_7879.htm?selectedLocale=en.

841. Personal Interview with Erling Wang

A final note regarding NATO bureaucracy is that much has been made of Smart Defence, the latest iteration of NATO's procurement policy. However the AGS procurement was not made with reference to this policy and therefore it is not considered significant in this research, or to contribute to driving progress for the acquisition.

PMOU

Once the Global Hawk solution had sufficient informal support,[842] the PMOU had to be signed to commit the 15 member states' funding for the acquisition. All 28 NATO member states also had to agree to fund the lifetime and infrastructure costs of the Programme via the RPPB. This eventually involved top-level US political pressure on reticent member states such as France.[843] The informal agreement to a 70% IP return on member state Programme investment was an important incentive to commit to the PMOU,[844] as well as the choice for the AGS Main Operating Base (MOB) location. This target of 70% was further confirmed in later cables detailing Turkish concerns for IP in the Programme.[845] In November 2007, diplomatic cables from CNAD and NAC meetings reveal member state arguments linking AGS programme investment directly to member state IP. Spain argued that the US, as Prime Contractor, should bear a larger share of the costs.[846] Italy's query regarding the location of the MoB suggests that this

842. NATO 2007. October 2007 CNAD makes progress; 25 Oct. 2007 - 26 Oct. 2007.

843. Personal Interview with Robert Bell

844. Personal Interview with Bogdan Horvath, Ludwig Decamps; US DIPLOMATIC CABLE 2009c. Turkish Participation in NATO Alliance Ground Surveillance (AGS) Program. Wikileaks.

845. Ibid.

846. US DIPLOMATIC CABLE 2007c. NORTH ATLANTIC COUNCIL READOUT - NOVEMBER 21, 2007. Wikileaks.

decision would affect its commitment to the Programme.[847] Rick Froh, a former NATO official, observed that countries fell out of the Programme where they did not feel that they received commensurate work share for their cost share.[848]

By the summer of 2008, 15 participating member states had openly stated their intention to sign the PMOU, and the draft document was circulated in July 2008, for national staffing and approval purposes.[849] In September a Request for Proposal (RfP) was released and NG 'identified a transatlantic team made up of industry from the AGS participating nations'.[850] These industrial partners were picked by the participating member states, without a competitive procedure, and informally agreed before the PMOU was signed.[851] Evidence of this *juste retour* can be seen in the final subcontractors detailed below. Thus, before the Contract terms were negotiated, informal agreement on Contractors and IP levels were necessary to ensure political support and signature for the PMOU for many member states.

At the 2008 October CNAD meeting, the issue of the MOB location was still unresolved.[852] This decision was important for member state IP and political support for the Programme. The MOB infrastructure was funded by all 28 member states via the RPPB. The decision for the location was made via a mix of member state compromise

847. Ibid.

848. Personal Interview with Rick Froh

849. NATO 2009b. NATO's Allied Ground Surveillance programme signature finalised; Press Release (2009) 139. Brussels.

850. Ibid.

851. Personal Interview with Brooks Tigner; Interview with 001;NATO 2008a. Cable: North Atlantic Council Meeting, November 21, 2008. Wikileaks.

852. NATO 2008b. CNAD advances on key capability requirements; 21 Oct. 2008 - 22 Oct. 2008. Brussels.

and NATO efforts. There were extensive exercises carried out by both NATO military personnel, General Michael Hain, and NATO IS, Ludwig Decamps, due to the sensitivities of costing and competition between member states.[853] The MOB was to be staffed by about 600 personnel. These would be trained for intelligence analysis and operational skills, and would be key personnel for national intelligence organisations.[854]

The main contenders for the base were Spain (Zaratoga); Germany (Schleswig-Jagel); and Italy (Sigonella). Other contenders were Turkey (Corlu), Poland (Powdiz), Greece (Aktion), Portugal (Beja), Romania (Timisoara) and Slovenia (Cerklje).[855] Diplomatic cables reveal calls from countries like Spain and Italy for the MOB to be based in their territory.[856] General Michael Hain carried out the first study for the location of the MOB. He visited all the sites and concluded that all of them were appropriate as the MOB to varying degrees.[857] Without strong military preference, the location decision for Italy was political, but rationally justified via a NATO IS study.[858] Ludwig DeCamps drew up a business case that justified the decision via an evaluation matrix. This provided arguments for Sigonella that were strong enough to make the case for the NATO decision, and also for member state representatives, whose location nominations had been declined, to take back to their Governments to gain their consent for the RPPB funding. The decision for Sigonella was efficient given the colocation with the USAF

853. Personal Interview with Erling Wang; Personal Interview with Ludwig Decamps;

854. Personal Interview with Erling Wang;

855. LOK, J. J. 2008. Basing Options. *Aviation Week & Space Technology,* 168.

856. US DIPLOMATIC CABLE 2007a. 3RD US-SPAIN HIGH LEVEL DEFENSE COMMITTEE REVIEWS AFGHANISTAN, KOSOVO, LEBANON, NATO. Wikileaks.; US DIPLOMATIC CABLE 2007c. NORTH ATLANTIC COUNCIL READOUT - NOVEMBER 21, 2007. Wikileaks.

857. LOK, J. J. 2008. Basing Options. *Aviation Week & Space Technology,* 168.

858. Personal Interview with Ludwig Decamps

Global Hawks, and the US were planning to enhance the infrastructure at the location. This, together with the support of Italy, meant that the operating costs for NATO could be reduced at the base.[859] It also meant that the aircraft could fly straight into transnational airspace. The choice for the base location had implications for Spanish, Turkish and Greek participation. None of these member states signed the PMOU. Here again IP is shown to be a major driver for the AGS procurement.

The failure of the Mixed Fleet solution had shown that the period before commitment to the PMOU was crucial to build support for the Programme.[860] Here, NATO's bureaucratic procedures and conferences drove momentum and progress. The 2009 NAC meeting in May emphasised the need to maintain momentum with the AGS acquisition.[861] During this period, a collegiate, multilateral dynamic emerged which encouraged participation from those wavering member states. A cable from the 2009 May NAC meeting refers to states such as Denmark, Estonia, Germany and Italy joining the US and encouraging other member states to sign the PMOU.[862] It notes that Germany would only sign the PMOU when there was critical mass and not before, which demonstrates the fragility of the progress. In 2009, France reintegrated into the NATO command structure that meant that it could be liable to join the NATO joint programmes such as AWACS and AGS. A diplomatic cable indicated that France

859. US DIPLOMATIC CABLE 2009c. Turkish Participation in NATO Alliance Ground Surveillance (AGS) Program. Wikileaks.; Personal Interview with Erling Wang

860. Personal Interview with Erling Wang

861. NATO 2009a. CNAD advances on capability requirements; 30 Apr. 2009 –. Brussels.

862. US DIPLOMATIC CABLE 2009a. Cable: North Atlantic Council Meeting, May 27, 2009. Wikileaks.

would only pay into programmes on a selective basis. It wanted to participate in the AGS Programme via 'contributions in kind', as did the UK.[863]

Another cable shows the US rehearsing the arguments for Turkey to remain in the Programme, detailing that Turkey's IP target of 70-80% of their potential €35 million cost share.[864] Despite the momentum, member states such as Spain, Portugal and Turkey began to withdraw their support for the Programme due to budgetary and IP concerns.[865] With member states pulling out at an alarming rate, NATO Defence Investment Division called an 'Ad Hoc' meeting to urge participation in the Programme, fearing that it would fail.[866] Here, NATO IS urged member states to commit to the acquisition or suffer another failed AGS proposal, possibly failure of the entire Programme. To the surprise and relief of IS staff, member states agreed to support the Programme, thus the PMOU gained sufficient support for signature.[867]

The PMOU was finally signed in September 2009 by 15 Member States: US, Germany, Italy, Denmark, Canada, Bulgaria, the Czech Republic, Estonia, Latvia, Lithuania, Luxembourg, Norway, Roumania, Slovakia, Slovenia.[868] The Press Statement details:

> 'The PMOU, along with the AGS Charter, sets the legal, organisational, and budgetary framework for the AGS programme and launches both the NATO

863. Ibid.

864. US DIPLOMATIC CABLE 2009c. Turkish Participation in NATO Alliance Ground Surveillance (AGS) Program. Wikileaks.

865. Ibid.

866. Personal Interview with Ludwig Decamps

867. Ibid.

868. NATO 2009b. NATO's Allied Ground Surveillance programme signature finalised; Press Release (2009) 139. Brussels.

AGS Management Organisation (NAGSMO) and NATO AGS Management Agency (NAGSMA) to take charge of the programme.'[869]

The PMOU set a budget ceiling on the AGS Core Capability at $1.4bn. All member states had received government commitments for this amount and could not increase this limit without going back to their Parliaments.[870]

The paragraphs above demonstrate that IP, political pressure, multilateral collegiate support and NATO role expansion drivers ensured that PMOU signature and agreement for common funding of AGS infrastructure were achieved. Political support was generated through calculated industrial benefits, but also aligning the capability in a security culture and emphasising the multilateral aspects. NATO performed an important role in facilitating member state agreement at critical points in this process that in part reflected the calculus driver of organisational role expansion. But as the NAGSMA General Manager commented:

'...first and foremost it was the political will to be part of that [PMOU]. And the CNAD helped solidify that political will. And pushed the 15 saying that this is the right thing to do, and all the ministries came together and said 'lets do it'.[871]

After the PMOU was signed, the role of CNAD and DID staff receded, and it became the responsibility of NAGSMA, the NG industry team and the Board of Directors to deliver the AGS Contract. The next section focuses on the industrial partnerships and drivers for the Contract conclusion.

869. Ibid.

870. Personal Interview Jim Edge

871. Ibid.

Contract

NG, the Prime Contractor, and NAGSMA now had to agree to Contract terms. Here, both parties were equally committed regarding their investment of reputation and effort into the Programme over the past 20 years. The PMOU conferred decision-making power to NATO's procurement body, NAGSMA. Member states were not operating the AGS capability; therefore they had little interest in the Contract details, leaving NAGSMA to decide the final terms with NG.[872] This meant the Contract negotiating stage was more flexible for NATO representatives compared to their counterparts at NG who had to refer to senior management for direction.[873] However, the Contractor awards and payment ceiling had been fairly publicly settled at the PMOU stage. This gave significant negotiating power to the Contractors when agreeing Contract terms.[874]

Another dynamic that affected Contract negotiations was the transatlantic cultural difference. Here the clash of corporate cultures where the different objectives of US actors versus European actors meant that agreement was difficult and provided distraction from efficient decision-making. National support of contractors exacerbated this dynamic. While the balance of Contract negotiating power nominally resided with the NAGSMA team, corporate actors had much information and member state support which empowered their negotiating stance. This maintained complex, time consuming, bureaucratic political decision-making.

872. Personal Interview with Otfried Wohlleben

873. Ibid.

874. Phone Interview with 001

A major motive for NAGSMA was organisational success and reputation and the fulfilment of its procurement role. There was also a concern for the cost efficiency of the Contract. However, as the Contract price and sub contractors had largely been chosen before the PMOU, negotiations for cost efficiency were hard to achieve. It would have been difficult for NATO to be coy about the price ceiling for the capability given the publicity that the Programme had concerning the PMOU and the conversations leading up to Contract negotiations. This put NG and other subcontractors in a stronger position regarding the terms and conditions (T's and C's) of the contract. NG had not had much experience of being a Prime Contractor in the past,[875] and was keen to succeed in the AGS Programme and to showcase the capability for potential future national contracts.[876] The NG objectives were also to conclude the procurement and to salvage some profit, given their 20-year investment into the Programme.[877] However, all industrial partners demonstrated elements of symbolic drivers to their actions relating to the prestige of a contract with NATO. This meant that the profit element, while important, was somewhat subsumed by the marketing benefits of a NATO contract. Finally, the negotiating team had to satisfy the expectations of the NG Management who were concerned to reduce the corporate risks of the Contract. Thus NG personnel had to refer extensively to their legal team and Management during the negotiations.[878]

The 2012 NATO Chicago Summit[879] was the target date for the Contract signing, and three events drove the Contract to its final agreement, demonstrating NATO

875. Personal Interview with 009

876. Personal Interview with Andrew Tyler

877. Phone Interview with 001

878. Personal Interview with Otfried Wohlleben

879. HOYLE, C. 2012. NATO to sign delayed AGS by May. *Flightglobal*.

commitment, NG compromise and member state multilateral, collegiate support. First, NAGSMA organised a retreat to thrash out the final T's and C's, the Statement of Work and to finalise the Contract price; second, NG's negotiating team managed their AGS risk management and final 'descoped' specification with NG Senior Management; and third, the US support of German obligations at the initial financing stage.

First, the NAGSMA and NG retreat was organised as a response to the tensions between the transatlantic business teams implementing the AGS Programme. Participants observed that the US corporate aims and objectives of personnel bonuses and management cultures differed strikingly from European corporate personnel outlooks that were longer term and less bonus driven.[880] This led to difficulties where member states were familiar with different procurement and legal priorities.[881] Further, NATO did not have a standard multinational procurement procedure, so NAGSMA had to create a process that satisfied the multinational industrial teams.[882] In July 2011, the negotiating parties reached a stage where the T's and C's had 25 outstanding items, the Statement of Work[883] and the final Contract Price were still not agreed. The NAGSMA team were under pressure to conclude the negotiations in time for the Chicago Summit. With this in mind the NAGSMA General Manager, Otfried Wohlleben, called for a weeklong meeting with NG, in the Belgian forest, to thrash out the final items. By Friday morning the price was still open and there were eight T's and C's to agree. The

880. Personal Interview with Otfried Wohlleben; Personal Interview with Erling Wang.

881. Phone Interview with Bob Zeiser and Matt Copija; Personal Interview with Erling Wang.

882. Personal Interview with Otfried Wohlleben

883. The Statement of Work details the activities, deliverables and timetables for any given project. https://www.projectmanager.com/blog/statement-work-definition-examples Accessed April 2018

teams then agreed to the Contract price via a 'descoping'[884] of the Statement of Work (subject to the agreement by NATO's SHAPE Headquarters, who ran the military requirements.) NAGSMA insisted that they would walk away unless there was a final agreement to the T's and C's by 6pm on the Friday evening. Finally, for the last four disputed items, the lead negotiators on each side went into a room with legal witnesses to make decisions. Thus NAGSMA leadership drove the format of the final negotiating meetings and achieved agreement to a working Contract.

Second, NAGSMA had to satisfy NG's risk management objectives within the Programme. Transatlantic attitudes to legal arrangements differ, as US corporate culture relies heavily on legal advice and documentation.[885] Officials observed differences in approach where the European Civil Law system usually involves very short T's and C's. This compares to the Anglo Saxon Common Law system (used by the US) that relies on precedent and longer T's and C's.[886] A major driver for NG was to get the legal context agreed and to limit their corporate risk and liability. This ultimately related to their calculus profit motive. NG corporate officials had to refer to their legal counterparts at every stage in the decision-making process,[887] whereas NAGSMA were able to make decisions without too much onerous oversight.[888] The NG objectives were eventually satisfied through the efforts of their legal team and their Project Manager, but it was a long and difficult process. For example, it took over a year to agree to NATO's

884. Descoping is a term used in procurement where the Statement of Work is reduced

885. Personal Interview with Otfried Wohlleben

886. ECONOMIST 2013. The Economist Explains What is the difference between Common Law and Civil Law. *Economist*.

887. Personal Interview with Otfried Wohlleben

888. Ibid.

Arbitration Court (rather than having the ability to take NATO to court in Melbourne, Florida).[889] Further, NG wanted to ring fence Contract risk in their operating company, NGISSII,[890] the legal procurement entity. This limited the exposure of the NG parent company to any liabilities incurred by the Contract. The teams took a year to agree to the NG parental guarantee demanded by the NAGSMA team.[891] Finally, NG was also reluctant to accept the SDI[892] design responsibility risk, normally borne by NG customers.[893] This was eventually agreed to as per the NAGSMA demands.[894] The agreement to the Contract through these difficulties shows the tenacity of the negotiating partners, the organisational role assertion drivers of NAGSMA, to achieve the procurement, and the profit and prestige incentives for NG.

The third event concerned the Contract Authorisation to Proceed (ATP). This was planned for March 2012 before the signing of the Contract at the Chicago summit. This released preliminary funding for industrial partners so that teams and processes could be assembled for the implementation of the Contract.[895] The ATP required finance authorisation, so the 'Call for Contributions' went from NAGSMA to the AGS Finance Committee, to obtain member state approval. The Finance Committee approved the call for contributions, but Germany needed to get Parliamentary Approval. However, because the team only translated the first 20 pages of the AGS Contract into German, the German Parliament refused to sign its approval until the whole Contract was in

889. Ibid.

890. NG Integrated Systems Sector International Incorporated

891. Personal Interview with Otfried Wohlleben

892. System Design Integrity

893. Personal Interview with Otfried Wohlleben

894. Ibid

895. Personal Interview with Erling Wang; Phone Interview with Bob Zeiser and Matt Copija

German.[896] This was not given in time for the ATP, and the US therefore stood for the German liability. This demonstrated US commitment to the Programme, and the importance of US ability to underwrite the project. After the ATP was given, the 'Technical Assistance Agreements' were signed. Importantly, these governed the authorisation of release of technical information by the US Export Control Regulations ITAR,[897] another obstacle that could have held up the Contract signing.

The AGS Contract was signed on May 2012 at the Chicago Summit. It was a Fixed Price, Single Programme[898] contract for the AGS Core Capability,[899] with the US corporation NG, as Prime Contractor for a Sole Source Contract,[900] with Flexible Industrial Participation (IP).[901] Total System Performance Responsibility (TSPR)[902] lies with NGISSII.[903] At this stage the subcontractors were confirmed and published. Many of the contractors had been working with NG during the proposal stage and were

896. Personal Interview with Otfried Wohlleben

897. BUNDESTAG 2013. Minor interpellation tabled by Member of the Bundestag Andrej Hunko, other Members of the Bundestag, and the Left Party parliamentary group
German participation in NATO's Alliance Ground Surveillance Programme Bundestag printed paper 17/14018. Berlin.

898. i.e. acquiring a single capability

899. NATO 2009b. NATO's Allied Ground Surveillance programme signature finalised; Press Release (2009) 139. Brussels.

900. i.e. with one Prime Contractor

901. Here NG has responsibility for the allocation of work shares to sub contractors; NAGSMA 2014. Acquisition of Alliance Ground Surveillance (AGS) Logistics Information System (ALIS) NAGSMA-CON-0018. Brussels: NATO.; NATO Northrup Grumman Systems Corporation: ADDENDUM TO TERMS AND CONDITIONS
FOR SUBCONTRACTS IN SUPPORT OF NATO ALLIANCE GROUND SURVELILLANCE (AGS) CORE RQ-4B UAV SYSTEM GLOBAL HAWK. p.14

902. i.e. NG has responsibility for delivering the Core Capability

903. NG Integrated Systems Sector International Incorporated

informally confirmed before the PMOU commitment.[904] These were either chosen by member states, or identified by NG as a participating member state contractor with sufficient expertise to contribute to the Programme.[905] Evidence for member state industrial imperatives can be seen in the table below which outlines participation and the associated corporate contracts. While NG were the main contractor (Tier 1) there were four heads of sub tiers (Tier 2) who dealt with the different aspects of the Programme, NG, Airbus (Germany), Leonardo (Italy) and Kongsberg (Norway). These companies dealt with Tier 3 member state industry within their section of the Programme:[906]

Nation	**Funding Base (€M)**	**Contractor**
Bulgaria	7.86	ZTA AD, Bianor (Bulgaria)
Czech Republic	20.51	ICZ Group, Retia (Czech),[907]
Denmark	32.70	Terma (Danish)[908]
Estonia	2.47	Aktors OU (Estonia)
Germany	400.47	**Tier 2: Airbus**
Italy	177.23	**Tier 2: Leonardo** (Italy) Electronic systems (formerly Selex Galileo)[909]

904. Phone Interview with 001

905. Phone Interview with Bob Zeiser and Matt Copija

906. EDGE, J. 2016. AGS Briefing, Alliance Ground Surveillance, a Transformational Capability for NATO. Brussels.

907. http://www.opinicus-sro.com/Participation-de-l-industrie-de Accessed January 2017

908. https://www.terma.com/press/news-2016/terma-contracted-to-supply-an-automated-target-recognition-and-identification-system-for-nato-ags/ Accessed January 2017

909. ARMY TECHNOLOGY.COM. 2012. *Northrop awards Nato AGS subcontract to Selex* [Online]. Available: http://www.army-technology.com/news/newsnorthrop-awards-nato-ags-subcontract-selex [Accessed April 2018].

Nation	Funding Base (€M)	Contractor
Latvia	3.17	DATI (Latvia),[910]
Lithuania	4.78	ELSIS (Lithuania),[911]
Luxembourg	3.47	SES (Luxembourg)
Norway	39.91	**Tier 2: Kongsberg** (Norway)
Poland	56.53	(3 Battle laboratory contracts)[912]
Romania	25.28	UTI Elletra (Romania)
Slovakia	10.33	Konstrukta (Slovakia)[913]
Slovenia	5.90	Comtrade d.o.o
United States	502.38	**Tier 1: Prime Contractor**: NG International Systems Sector Inc (NGISSII)
Canada (withdrawn)	37.00	General Dynamics (Canada)
TOTAL	**1,329.99**	

Figure 7. AGS Funding Base

As seen above, every member state has at least one contractor that is associated with the Programme. Thus this table demonstrates how industrial imperatives supported the AGS Contract. NG had experience of producing Global Hawk ground stations for the USAF. However, European IP demands meant that their inexperienced industry fulfilled this aspect of the Programme. There would have been no PMOU agreement

910. http://kc.lv/we-take-part-in-the-implementation-of-a-large-scale-nato-project/ Accessed January 2017

911. http://kam.lt/en/news_1098/current_issues/national_defence_authorities_discussed_lithuanias_involvement_in_natos_alliance_ground_surveillance_programme_with_representative_of_germanys_eads_group Accessed January 2017

912. Personal Interview with Jim Edge

913. http://www.dmdgroup.eu/sk/our-company/konstrukta-defence Accessed January 2017

without this. Former NATO officials estimate that the inclusion of European industry added over €100m onto the costs of the Programme.[914] A former NATO official observed that all nations were looking for technological contracts or 'noble' work.[915] Therefore, as far as possible, all participating member state contractors received a software or technology contract. Thus calculus drivers for industrial imperatives were evident in the Contract outcome.

There is some evidence that the smaller, newer member states did not receive significant IP indicating that multilateral drivers were stronger for their participation. These countries received industrial training as part of their participation where their industries were not able to contribute to the transportable and mobile ground stations. NG staff comment that some countries' industry had limited technical ability but their personnel were 'allocated' to the European teams.[916] Where IP drivers were less strong, symbolic, multilateral drivers for the new member states are in evidence.

Symbolic drivers were also present in industry contributions to the successful procurement. Here, cultural aspiration for prestigious association with NATO led to sacrifice of profits. While specific profit figures for the sub contracts are not available, symbolic prestige associated with the NATO contracts was a widely held view. A

914. Personal Interview with Otfried Wohlleben

915. Personal Interview with Erling Wang; Personal Interview with Jim Edge

916. Phone Interview with Matt Copija and Bob Zeiser

former US official noted the low value of the NATO AGS Contract in the defence industry,[917] and that incentives for the fulfilment included branding:

> So for Airbus Group or for Leonardo or Thales, these programmes are important because they have high profile and it helps brand the company as a major player globally, you [supply] the most important Alliance in history sort of thing.[918]

Further, the former Chairman of NAGSMA also commented on the perception of industry on working with NATO and the prestige of the Global Hawks Contract and noted that Kongsberg is unlikely to profit on the NATO contract because: 'Its important to be part of this because this is the future.'[919] Thus these prestigious cultural aspects of the NATO AGS Programme lend legitimacy to industry for future contracts.

Final Decisions

The research now considers the final decisions concerning the funding, member state participation, and the crucial role of the US in encouraging and supporting the AGS Programme. Drivers for the US were economically driven, but also to politically encourage European member states to acquire more defence assets. The separate decision-making process for the common funded operational and infrastructure costs of the AGS Programme occurred alongside the Contract negotiation. While this negotiation was not directly part of the procurement process, agreement to these costs was a necessary step to enable the acquisition of the AGS assets. The body responsible for disbursing the Common Funds is the RPPB. The RPPB has the largest budgets in

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917. National UAV Contracts would be in the region of €1bn per nation: SIEBOLD, S. & SHALAL ESA, A. 2017. *Germany to buy Triton drone to replace canceled Euro Hawk-sources* [Online]. Available: http://www.reuters.com/article/us-germany-northrop-idUSKBN16E14D [Accessed April 2017].

918. Personal Interview with Robert Bell

919. .Personal Interview with Erling Wang

the NATO Headquarters. It is responsible for allocating NATO's Civil and Military Budgets as well as NATO's Security and Investment Programme (NSIP).[920] It is therefore a powerful actor in the NATO bureaucracy. The focus of the RPPB was different to the NAGSMA team. They considered the long term, total costs of the AGS capability, rather than the details of the immediate acquisition of the assets. The RPPB was concerned to cap AGS on-going costs, and drivers for agreement were that the assets were to be available as soon as possible, and to be part of a broader NATO joint surveillance effort.[921]

From September 2011 to March 2012 Common Funding debates took place. NATO's 'Consensus Principle' requires unanimity from all member states and the October 2011 Defence Ministers' meeting did not achieve agreement. France was particularly reticent and their eventual agreement was finally obtained at the November 2011 G20 meeting in Cannes. Here the two leaders, Obama and Sarkozy, went for a walk on the beach and agreed that the AGS Programme would be part of a broad NATO Joint Surveillance effort.[922] This aspect was subsequently emphasised in the narrative surrounding the AGS, for example where DoD official, Joseph Collins described the Programme: 'AGS provides the core for NATO Joint ISR'.[923] The episode reveals the importance of US political pressure and leadership in the procurement decision-making process. Consensus was finally reached in February 2012.[924] Costs were capped at €105.4m for

920. http://www.nato.int/cps/en/natohq/topics_67653.htm Accessed January 2017

921. Personal Interview with Robert Bell

922. Ibid.

923. SEFFERS, G. I. 2012. Diplomacy Wins the Day for Alliance Ground Surveillance System. *Signal Magazine*.

924. Ibid.

the AGS infrastructure; €250.0m for 20 years leasing of satellite communications;[925] and operational costs were set at €79.3 million a year.[926]

Despite the signed PMOU, member states continue to prevaricate; Poland, Denmark and Canada left the Programme from 2009 to 2011 citing budgeting concerns. Denmark and Poland then rejoined at later stages. NAGSMO still actively sought to recruit further participants for additional funding and political support for the Programme. This effort in particular was aimed at new NATO member states. NAGSMA held meetings in Croatia in December 2009 with a delegation that included high-level NG personnel, and in Albania in April 2010 shortly after they both joined the Alliance.[927] These movements emphasise member state drivers for the procurement such as multilateral loyalty and industrial imperatives.

Canada withdrew from both the AWACs and AGS Programmes in 2011.[928] The official reason cited was the Programme costs and national budget cuts,[929] but it is often

925. BUNDESTAG 2013. Minor interpellation tabled by Member of the Bundestag Andrej Hunko, other Members of the Bundestag, and the Left Party parliamentary group
German participation in NATO's Alliance Ground Surveillance Programme Bundestag printed paper 17/14018. Berlin.

926. COON, S. 2013. NATO Alliance Ground Surveillance (AGS). Shape.;

927. Details of these press releases can be found at http://nagsma.nato.int/news/default.aspx accessed January 2017.

928. BUNDESTAG 2013. Minor interpellation tabled by Member of the Bundestag Andrej Hunko, other Members of the Bundestag, and the Left Party parliamentary group
German participation in NATO's Alliance Ground Surveillance Programme Bundestag printed paper 17/14018. Berlin. Q.40

929. BREWSTER, M. 2013. NATO surveillance programs withdrawal will cost Canada contracts. *The Globe and Mail*.; PUGLIESE, D. 2012. Canada pulls out of NATO airborne surveillance programs to save $90m *National Post*.

explained as a political decision. Canada's defence spending actually rose in the aftermath of the financial crisis.[930] Observers note that when France debated the use of AWACs in Afghanistan,[931] Canada objected and decided to leave the AWACs Programme. Subsequently, Belgium insisted that Canada left the AGS Programme too, on the grounds that member states should not be able to pick and choose participation in joint assets. In the event, Canada had to pay to leave the AGS Programme, but it still retained part of its industrial contract,[932] the rest being absorbed by NG.

Denmark left the Programme in 2010, citing financial reasons.[933] This resulted in a public remonstration by the Danish Secretary General Rasmussen[934] for two reasons. First, in his capacity as the former Danish Prime Minister; and second, to discourage other member states from leaving the Programme. In May 2012, Denmark announced that it was rejoining the Programme, explaining the decision due to a resolution of its defence finances; because the Libyan intervention had demonstrated that ISR had avoided collateral civilian deaths; and that Smart Defence was a policy that they supported.[935] Anecdotally, the US President directly called the Danish president to

930. PONTIROLI GOBBI, F. 2013. NATO in the Aftermath of the Financial Crisis. *In:* LIBRARY OF THE EUROPEAN PARLIAMENT (ed.) *Library Briefing.* Brussels.

931. http://www.dw.com/en/nato-to-send-awacs-planes-to-afghanistan/a-4320757 (Accessed January 2018); Personal Interview with Otfried Wohlleben

932. GENERAL DYNAMICS 2013. General Dynamics Canada Awarded Contract on NATO Alliance Ground Surveillance Program. Ottowa.; Personal Interview with Jim Edge

933. PAPIC, M. 2010. *NATO Critical of Danish Spending Cuts* [Online]. Wikileaks. Available: https://wikileaks.org/gifiles/docs/17/1781133_europe-digest-100623-marko-.html [Accessed].

934. NATO 2010a. Statement by the Secretary General on Danish Withdrawal from AGS Project. Brussels.

935. DANISH MINISTRY OF DEFENCE 2012. Denmark rejoins the AGS Project.

encourage participation,[936] a further example of the US driving the process forward against European hesitation.

Finally, Poland had left the Programme in early 2009 before committing to the PMOU, citing financial problems.[937] However, it also increased its defence budget by 29% after the financial crisis.[938] Poland then announced its intention to rejoin the Programme in 2014 with a significant contribution of 4.5% of the Programme costs.[939] This is thought to have been because they wanted access to assets. Again, significantly for this late stage, Poland was able to gain three contracts when rejoining the Programme, including the creation of a 'battle lab', mirroring information retrieval and analysis systems, to provide back up and training.[940]

This section considered concluding aspects of the AGS Programme procurement. During the Contract discussions, drivers behind progress of the procurement process were the negotiating parties' objectives regarding the reputation and organisational role expansion of NATO, and managing the profit motives and risk objectives of NG. Both these drivers can be classed as calculus. During the agreement for Common Funded infrastructure and operational costs, evidence indicates that the US high-level involvement cleared the final obstacles such as French reticence. The selection of the Contractors confirmed member state industrial imperatives and *juste retour* drivers for

936. Personal Interview with Erling Wang

937. GLOWACKI, B. 2013. Poland rejoins NATO AGS Programme. *Flightglobal*.

938. PONTIROLI GOBBI, F. 2013. NATO in the Aftermath of the Financial Crisis. *In:* LIBRARY OF THE EUROPEAN PARLIAMENT (ed.) *Library Briefing.* Brussels.

939. GLOWACKI, B. 2013. Poland rejoins NATO AGS Programme. *Flightglobal*.

940. Personal Interview with Jim Edge

participation in the Programme. Crucial cultural drivers included the continued commitment of the newer member states for multilateral reasons. This was supported by evidence of their limited industrial participation, indicating that they had few industrial imperatives. Further symbolic drivers that supported the procurement were the prestigious associations with NATO that generated the commitment of industry to invest time and effort into AGS proposals. Finally, the realignment of the AGS mission to civil military functions and the community of values strategic culture also helped to cement political support for the Programme. Anecdotal evidence, public statements and NATO official literature all support arguments for this cultural influence.

The final section of the case study applies the theoretical framework to the findings and assesses the presence of calculus and cultural drivers for NATO's AGS Programme.

NATO AGS Conclusions

This concluding section applies the theoretical framework to the findings of the NATO AGS case study. The first section identifies the presence and balance of drivers (strategic rationale, industrial imperatives, technical imperatives, organisational role expansion and symbolic drivers) during decision-making stages of the AGS programme. It applies the Bennett's tests for causation to the findings.[941] This aids analysis of evidence for the dominant driver at different stages of the procurement decision-making.

941. Bennett's Tests for causation were outlined in Chapter 1 Methodology Section p.61. Tests for causation are categorised as 'Doubly Decisive'; 'Smoking Gun'; passing the 'Hoop'; and 'Straw in the Wind'. BENNETT, A. 2010. Process tracing and causal inference. *In:* BRADY, H. & COLLIER, D. (eds.) *Rethinking Social Inquiry.* Rowman and Littlefield.

The second section applies the broader theoretical framework, strategic choice, sociological institutionalism and organisation theory to the findings. It demonstrates how strategic choice, calculus drivers are insufficient to solely explain the collaborative procurement outcomes; and how sociological institutionalism and organisational theories can aid the explanations of successful collaborative decision-making.

Findings and Analysis regarding Drivers for Procurement

The three successive proposals (JStars, Mixed Fleet and Global Hawks) for the AGS Programme solution provide useful evidence for the analysis of the drivers for the procurement. The Global Hawk solution demonstrates aspects of each driver, but referring to the two failed proposals enables analysis of those drivers that were *insufficient* to conclude the process in the early stages. Using Bennett's tests for necessary and sufficient causation, to adjudicate between differing explanations,[942] this section considers each driver in turn. There is a balance and combination of drivers that collude to generate political support. This section looks at the combination that seems to explain the final decision for the Global Hawks AGS solution.

Strategic Choice (Calculus)

Strategic Rational Driver

The rational theory for the AGS procurement involved three drivers: first, of necessary security missions that required surveillance; second, the capability (of JStars and Global Hawks) for the mission; and third, the cost efficiencies of collaboratively acquiring the capability through NATO. First, the JStars and Mixed Fleet proposals were backed by a military requirement but this proved insufficient to generate European member state

942. Ibid. See p.61 in Chapter One.

political will for these solutions and to overcome the paralysis of industrial imperatives clashing with cost considerations. **Thus the strategic choice driver (military requirements) explanations for the procurement would appear to be insufficient to explain the procurement.**

Second, the JStars and Mixed Fleet solutions both involved manned solutions capable of carrying out the mission. The Global Hawk solution is an unmanned solution that has limited capability in a contested scenario, but is suited to uncontested, benign environments. **Thus, strategic choice driver of mission capability would not seem to be a sufficient justification for the Global Hawk solution.** Third, both the JStars and Mixed Fleet solution failed the cost efficiency requirements of member states. The Global Hawks proposal cost far less than the two previous proposals. **This calculus, strategic choice driver, of cost efficiency, then passes the 'hoop' test as necessary for the Programme.** Thus calculus, strategic rationale explanations for collaboration would appear to fail Bennett's tests for AGS military mission and capability requirements, but pass for the cost aspects of the Global Hawk solution.

Industrial Imperative Driver

Industrial imperative drivers and European IP[943] were crucial for the generation of political support during the AGS Process. **Evidence showed that this driver underpinned US essential support for the Programme, passing the hoop test.** However, the Programme needed European IP to succeed, as the failure of the JStars proposal demonstrated. The failure of the Mixed Fleet proposal where there was extensive European member state IP, shows that the industrial imperative driver for

943. IP: Industrial Participation

these states not sufficient to drive the collaborative procurement. **Finally, data indicated that European member state IP, and related industrial imperative drivers, increased the cost of the final Global Hawk solution, but this was necessary for the European member state political support for the Programme.**

Technical Imperative Driver

Technical imperatives were present during the procurement process particularly in the Mixed Fleet solution. **However the final Global Hawk, Single Source solution showed that technical transfer was not a priority necessary for the procurement, and therefore this driver has been discarded.** While there are some symbolic technical imperatives related to the Programme giving access to prestigious, sophisticated assets, there was little technical transfer in the final contract that demonstrates any significance for this explanation.

Organisation Theory

Organisation Role Expansion Driver

Organisation survival and role expansion was present as a driver in all three proposed solutions, so it is difficult to deduce its importance from this angle. However without NATO as an organisation with its determination to conclude the process, the Programme would not have existed. **Thus NATO organisation role expansion driver would seem to be necessary but not sufficient for the Programme and passes the hoop test.**

Sociological Institutionalism (Culture)

Symbolic Drivers

Multilateralism: Multilateralism related to the NATO organisation was present to gain the critical mass for the AGS solution. While this was not related to a particular solution or aspect of the capability, the presence of the new member states in the Programme gave it critical weight. This symbolic driver was not present in the first JStars proposal. Further, there was evidence of relationships between nations providing momentum for the collaborative procurement during debates. **Therefore the study concludes that multilateralism is necessary and passes the 'smoking gun' test (sufficient but not necessary) for driving the procurement.**

'Community of Values': The realignment of the mission to civil military functions within Western symbolic 'community of values' driver is also proved to be a further sufficient factor in progressing agreement to the AGS Programme. When the mission began to be re-articulated and influenced by the civil military strategic culture, the Programme gained additional traction with European member states. The Global Hawk solution was more flexible for civil military functions, despite being an expensive solution for these missions. The driver of political will for the AGS mission had cultural influences related to European civil military strategic culture. **Symbolic drivers related to Western 'community of values', civil military missions may then be seen to pass the 'smoking gun' test as a cultural explanation for the procurement.**

Symbolic Prestige: Finally, the tenacity of industry in the procurement process was driven by the prestige associated with NATO contracts alongside a rational profit

motive. **Symbolic prestige would also seem to be a 'smoking gun' test, where it is sufficient to support the procurement but not necessary to explain it.**

In conclusion, the balance of drivers for the AGS collaborative procurement was affected by a number of factors at different stages of the decision-making: the dominance of the US member state, with its important defence industry and the fact that it was prepared to shoulder the large portion of the procurement costs; the expansion of the organisation to new member states in 2004; the articulation of new civil military and Western 'community of values' missions after 9/11, and the escalating migrant crisis.

Findings and Analysis regarding the Theoretical Framework

The paragraphs below consider strategic choice, sociological institutionalist and organisation theory explanations for the collaborative procurement processes at different stages of the decision-making chain.

1) Explanations for AGS Requirement and missions

Strategic Choice Explanations: Strategic Rationale for the AGS Requirement

This NATO case study demonstrates that the initial military, strategic rationale driver for the AGS Programme was insufficient to drive the procurement to a successful conclusion. US military officers wrote the MMR for the AGS Programme with reference to expeditionary warfare requirements in Afghanistan and Iraq. However, case study data demonstrated the diversity of member state opinion, where other Western member states did not share the US' priorities for the Programme. The lack of urgency subdued the strategic rationale driver in the process. This was demonstrated by

the slow progress of the initial AGS proposals and the increased weight of other drivers, such as industrial and technical imperatives.

Sociological Institutionalist Explanations: Symbolic 'community of values' driver for the AGS Requirement

Symbolic drivers became important at later stages of the procurement. The AGS Programme requirements evolved from solely military purposes to include civil military roles of counter terrorism and border control. This mission definition encouraged political support for the Programme from Western member states. The culturally driven, civil military drivers were referred to in later arguments for the Programme by US representatives, NATO IS and NG personnel as 'magazine aspects' to ensure the acceptability of the policy and procurement to domestic constituents.

2) Explanations for Political Support for the NATO AGS Programme

Strategic Choice Explanation: US Industrial Imperative drivers, cost sharing imperatives, and political influence on other member states

A major political factor driving the procurement was the US' industrial imperatives and political concerns. The procurement made no rational sense for the US, as it already had the Global Hawk capability, therefore a major driver for this member state had to be industrial imperatives. It was also important to the US, and NATO, that Western member states contributed to the cost of surveillance assets in multilateral NATO operations. The AGS Programme met this objective. Although the US presented the AGS procurement as a military requirement, and the US also had industrial imperatives, evidence suggests that it also desired some commitment from Western member states regarding the burden sharing of surveillance assets for future joint operations. This

strategic choice driver gained in significance where US representatives and leaders invested time and energy in the process, and employed pressure upon other member states to participate in the Programme.

Sociological Institutionalist Explanation: Symbolic multilateralism within NATO

Multilateralism and political objectives were important for new European member states' participation in the AGS procurement. This symbolic driver for these states gained in significance when older member states withdrew their participation in the Programme due to IP and cost concerns. The driver did not subdue industrial imperatives, NATO's bureaucratic process ensured that these were strong, but multilateralism drove the participation of a significant block of smaller member states. This made a difference during consensus decision-making for aspects of the Programme, such as agreement to the common funding of the AGS infrastructure required by the RPPB.

Political, collegiate dynamics related to multilateralism were also significant during the CNAD negotiations. Here older, participating member states, such as the US, Germany, Norway and Italy, encouraged fellow nations to support the Programme, using political and diplomatic relationships to achieve collaboration. Thus the spirit of multilateralism, while difficult to perceive with the transatlantic tensions and the bureaucratic politics within NATO, was significant for the success of the procurement.

3) Explanations for the final AGS Global Hawks Solution

Strategic Choice Explanation: Industrial imperatives and Cost saving imperatives

The final AGS Global Hawk solution was relatively expensive to perform civil military roles, and relatively constrained regarding military roles. As the solution was compromised with regard to cost and role, other drivers were considered to explain the choice for the solution. Industrial imperatives were important for member states to agree to an acceptable solution for NATO's AGS Programme. This driver was present for some member states' participation, such as the US, but could not fully explain the final consensus for the Global Hawk solution that involved low levels of IP for European member states. The research noted that a more efficient solution would have been the NG 'Triton'. However, member state reluctance to commit funding to the Programme, and the laborious decision-making structures within NATO, made the PMOU an inflexible document and constrained any amendments to the specification especially with regards to cost, but also regarding the solution itself.

Calculus, cost efficiency drivers were present in the decision-making processes for the AGS Programme solution. A significant driver for making the acquisition through NATO was that the US funded a large percentage of the Programme costs. The final solution of Global Hawks was certainly much cheaper than the previous proposals for the Programme. However, in the final Global Hawks solution, European member states provided the ground stations element of the Programme due to industrial imperatives that overcame certain cost saving drivers, as NG could have provided this more cheaply and efficiently.

Institutionalist explanation: Symbolic drivers for specification and industry participation / profit sacrifice

When the industrial imperatives clashed with the cost savings driver and derailed the JStars and Mixed Fleet proposals, symbolic drivers gained weight in the decision-making. Cultural associations with the final Global Hawk specification, such as references to dual use, civil military functions of the Global Hawks increased with member state 'community of values' priorities; and the prestigious RMA culture encouraged consensus for the Global Hawks specification where this aligned with domestic programmes.

Another aspect to finding an acceptable solution was where industrial actors sacrificed profit margin in supplying the surveillance solutions. This had cost implications in that they did not reflect their full investments in the final price for the AGS solution. The incentive for this was the reflected prestige of working with NATO. This symbolic driver became significant in the balance when decision-making stalled and necessitated increased investment from industrial partners to continue to submit proposals. Thus this driver gained in importance for the success of the collaboration.

Despite its limitations in contested airspace, and the fact that it was an expensive solution for civil military roles, Global Hawks was chosen as a solution by member states. It represented sophisticated US technology emanating from the US RMA culture. It could also be used for civil military roles that was attractive for member states, particularly for nations such as Germany who were buying this capability for domestic military forces as well.

4) Explanations for Bureaucratic Procurement Processes and Contractual Negotiations

Organisation Theory explanations: Role expansion driver

NATO, as an organisation, was eager to prove itself of use to member states in order to establish and expand its role in future security operations. Therefore NATO's IS readily supported the AGS Programme, despite there being little European member state enthusiasm to buy a US generated capability. However, the lack of scrutiny and slow pace of funding commitments to the Programme limited accountability and the influence of NATO on the procurement process, and lent power to member states. This strengthened drivers such as industrial imperatives.

Sociological Institutionalist Explanations: Standard Operating Procedures

The procurement benefitted from NATO's SOPs and bureaucratic committees that kept the procurement process alive when momentum stalled. NATO bureaucratic summits and conferences also provided opportunities for political intervention, and strengthened the multilateralism driver. Bilateral meetings also circumvented laborious decision-making structures and contributed to the generation of political support for the Programme. These were especially important where the procurement stalled due to the clash of cost efficiency drivers and industrial imperatives. At this point NATO's CNAD meetings and the AGS steering committee ensured continued efforts to fulfil the MMR.

Strategic Choice Explanations: Industrial imperatives

Finally, the form of contract used by NATO, 'Total System Performance Responsibility' with the Prime Contractor, NG, lent power to industry. This meant that industry imperatives continued especially where the US supported NG's solutions. The

transatlantic corporate teams suffered from cultural clashes between the European and US contractors, and these were exacerbated and given weight where member states supported their national contractors.

In sum and to answer the research question, the 20-year length of time taken to acquire the AGS capability suggests that initial strategic rationale, industrial and technical imperatives, while contributing to the policy stage, were insufficient to fully explain the consensus for the AGS Programme. These divisive calculus drivers clashed and caused the Programme to stall. The low levels of scrutiny over the process led to a lack of discipline and restraint regarding IP and costs. Agreement was only found where there was acceptable cost profile that met with a culturally acceptable security solution and a politically acceptable coalition within NATO. Here, symbolic, cultural drivers gained in significance and generated collegiate dynamics related to civil military missions, multilateralism and prestige. The cultural and political factors discussed above provided the essential glue and political support without which the Programme could not have survived the *juste retour* imperatives, the pulling and hauling of member state debates or the corporate difficulties in the transatlantic industrial teams.

What is interesting about the findings is the change in balance of drivers during the three proposals. Where IP and cost considerations paralysed the process, the motivation to progress the collaborative procurement did not fall to rational drivers of the security mission, but rather to symbolic drivers of multilateralism, civil military solutions and the tenacity of industry staff motivated by the prestige of a NATO contract. Industrial imperative, calculus, drivers were strong and unchecked through the weak NATO organisational power and lack of public scrutiny. However cultural, symbolic drivers

provided essential coherence for political support towards the Programme. Without these cultural drivers the final Global Hawk proposal would not have survived the *juste retour* pulling and hauling of Member State debates or the corporate difficulties in the transatlantic industrial teams.

Chapter 5: EU Case Study

Introduction

This chapter considers the decision-making behind Frontex's[944] procurement of two contracts for surveillance functions related to the Eurosur regulation. Eurosur is a border surveillance network, a 'system of systems' that draws information from external sources to form a situational picture of activity at the EU borders to raise reaction capability.[945] The last chapter considered NATO's award of just one contract for the procurement of its AGS capability, managed by a 'Prime Contractor', Northrop Grumman (NG). NG then managed subcontracts for the related software and surveillance assets under this contract. This chapter considers the Commission's smaller scale surveillance capability contracts, directly managed by Frontex rather than an industrial partner.

The chapter considers two contracts, where the policy and procurement has evolved over a period of 12 years from 2003 to 2015. First, the contract for IT services to build the Eurosur Communication Network (ECN), which coordinates and disseminates surveillance information amongst EU member states. Second, the Aerial Surveillance Services (ASS) contract, where external contractors perform surveillance on behalf of Frontex. These are two low value (in the context of security and defence spend)

944. Frontex: 'European Agency for the Management of Operational Cooperation at the External Borders of the member states of the European Union': Hereafter known as Frontex, the Agency, or the Organisation.

945. PAWLAK, P. & KUROWSKA, X. 2012. The fog of border. *In:* KAUNERT, C., LEONARD, S. & PAWLAK, P. (eds.) *European homeland security: a European strategy in the making?* Abingdon: Routledge.

contracts of €10 million - €12 million each. Analysis of these contracts is significant in that they represent instances of the EU Commission (the Commission) procuring and carrying out security functions in its own right. At that time in 2015, they were also the highest value procurements that Frontex had carried out.

The research analysed the policy and procurement processes to identify drivers that facilitated member state political support and organisation incentives for the procurement of these contracts. The study poses the research question: is the procurement of surveillance capability driven by calculus or culture? It found the procurement in this case study has been driven by a combination of factors which included the migrant crisis, cultural alignments, role expansion, cost efficiency, and solidarity within the organisation culture.

First, the rising numbers of illegal migrants since 2000, lead to the Frontex and Eurosur regulations forming key parts of EU policy to address member state concerns regarding border surveillance. The security environment was pressurised with these concerns, which ranged from calculus security objectives linked to transnational crime, to cultural objectives for migrant safety and fundamental rights, linked to the Western 'community of values'. The migrant crisis was high profile and generated much comment in popular and academic press. This contributed to the urgency and scrutiny of Frontex's response and affected procurement activities concerning surveillance capability.

Second, collaboration also symbolises cultural solidarity of member states. The Frontex contracts demonstrate collaboration regarding a security function, demonstrating coherent strategic purposes and alliances. This involves a certain cultural alignment and

evidence is shown of how imperatives, such as a civil security context and the humane treatment of illegal immigrants, facilitate political will for Frontex's expanded security mandate and agreement to the Eurosur regulation. The research demonstrates how the successful procurement of the contracts reflect the Commission's ability to achieve member state political will by referring to these drivers.

Third, the research found evidence of role expansion drivers where the two contracts procured delivered new security functions for the Commission and Frontex. Here, Commission staff and procedures drove the procurement contracts that delivered surveillance capability. The research applied the findings of Chapter Three to the case study and found that the bureaucratic structure and organisational culture enabled Frontex's procurement processes. These include aspects such as the low levels of bureaucratic politics and access to funding, and are expanded below.

Fourth, collaborative procurement is an effective way to fulfil joint border surveillance functions and can provide calculus cost efficiencies. This may be through the sharing of assets, but also through cost efficiencies achieved through industrial competition related to contracts awarded by the Commission and Frontex.

Frontex and the Commission's coherent organisation culture reduced bureaucratic politics and enhanced efficient decision-making. The involvement of multiple member states brings a complexity to multilateral procurement that may or may not be managed by the organisation. This study concludes that decision-making for the Frontex policy and procurement was coordinated and governed by the Commission's strategic vision for border surveillance. It was underpinned by a coherent, culturally aligned staff with few

member state allegiances. The organisation operated with reference to academic and research oriented positions alongside member state security concerns. Thus the research also refers to some of the secondary literature that influenced policy for Frontex and Eurosur.

The Commission was proactive in its strategy concerning border surveillance and related capabilities, linked to the FP7 planning and research programme[946] followed by implementation of policy.[947] This chapter finds that the Commission and Frontex's processes reduced reliance on member state decision-making, and the occurrence of bureaucratic politics, through its bureaucratic structure. Some evidence of bureaucratic politics was found in the specification of the ECN,[948] where national border agency objectives distracted from the most optimal solution. However, the research found that the Commission and Frontex, achieved considerable decision-making efficiency regarding agreement to the proposed Eurosur policy and decision-making, and especially regarding the ASS[949] contract.

Frontex's procurement processes were also enabled by access to funding, the low value of the contracts and the Framework contract format. A major factor in Frontex's effective procurement process is access to finance. This empowers Frontex, lessens the influence of member state interests, and increases the weight of organisation objectives

946. https://ec.europa.eu/research/fp7/understanding/fp7inbrief/what-is_en.html Accessed June 2017

947. EU COUNCIL 2006. Council approves EU research programmes for 2007-2013; 16887/06 (Presse 366). Brussels.

948. Eurosur Communication Network

949. Aerial Surveillance Services

for role expansion, and meeting societal expectations for organisational efficiency and functional legitimacy:

> 'I can tell you a very very simple but very important difference between NATO, the [EU] Council and this Agency of the Commission. ..... Council doesn't have money, the money has to be put for any activity you want to do. The Commission has the money and you have to find a good case to explain it. So the difference is in NATO and in the European Defence agency, we have ideas and no money. Here we have money, I am trying to find ideas. It's a big difference, it is day and night.'[950]

In 2016 Frontex' budgets grew from €84.9 million (in 2012)[951] to €254m.[952] This increase in budget reflects the Agency's widening remit. Frontex budgets are small in the context of national defence budgets, but in relation to EU collaborative security functions this represents a large amount. For example the European Defence Agency (EDA) budget was €30.5 million in 2016,[953] and Europol's budget was €100.2 million in the same year.[954] Audit reports reflect that the Agency sometimes did not spend the entire budget, which leads to censure regarding carryovers.[955] This will be shown to be significant with regard to the procurement of the ASS contract.

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950. Personal Interview with Gregorio Ameyugo

951. FRONTEX 2011. Frontex 2012 Programme of Work. Warsaw.

952. https://frontex.europa.eu/assets/Key_Documents/Budget/Budget_2016.pdf Accessed April 2018

953. https://www.eda.europa.eu/Aboutus/who-we-are/Finance Accessed May 2017

954. EU COMMISSION 2016d. Statement of revenue and expenditure of the European Police Office for the financial year 2016. Brussels: Official Journal of the European Union.

955. EUROPEAN COURT OF AUDITORS 2014b. Report on the annual accounts of the European Agency for the Management of Operational Cooperation at the External Borders of the Member States for the financial year 2013. Luxembourg.

Frontex obtains financial authorisation via its Programme of Work (PoW) but it can also access other funds such as EU External Border Funds, and Research and Development Funds.[956] Each year Frontex has a PoW with an associated budget that is written and approved in advance. It is under this PoW that budgets for the contracts are, in theory, approved. Thus the budget for Eurosur infrastructure can be seen in the 2010, 2011 PoW and onwards.[957] Interestingly the ASS contract did not appear in the PoW when it was first procured in 2014/2015, due to the short timeline of the migration crisis, although it does appear in the 2016 PoW.[958] The PoW document is initiated by Frontex officials and approved by member state representatives on the Management Board and the Commission. The input from the Commission is lengthy and from many different departments, including DG MHA,[959] DG HR,[960] DG Budget, DG Mare, European Maritime Safety Agency (EMSA), and DG Grow for Research and Development.[961] Commission input in general, is significant and fundamental to the definition of the Frontex policy and workflow.

Two further factors empower Frontex in the contracts analysed below, their low value and the Framework contract format. First, taken individually, the contracts are small,

956. EU COMMISSION 2008a. COMMISSION STAFF WORKING DOCUMENT Accompanying document to the COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Examining the creation of a European Border Surveillance System (EUROSUR) Impact assessment. Brussels. p.35 and confirmed by interview with EU Official

957. FRONTEX 2009. Frontex Programme of Work 2010. Warsaw. p.34,38,57 ;FRONTEX 2010a. Frontex Programme of Work 2011. Warsaw. p.54; FRONTEX 2011. Frontex 2012 Programme of Work. Warsaw.

958. FRONTEX 2015c. *Frontex Single Programming Document 2016-2019,* Warsaw. p.35

959. Migration and Home Affairs

960. Human Resources

961. Personal Interview with 003

which means that Frontex is currently able to manage each contract individually, rather than employ a Prime Contractor. EU officials find this control over contracts desirable compared to the use of Prime Contractors where the industrial partner may have a stronger position in the procurement process. Another implication of the low value contracts is that larger industrial players find it difficult to make a profit, resulting in smaller companies being used. These companies have less lobbying power, are eager to gain Commission contracts for prestigious reasons, and are easier for Frontex to manage.

Second, the Framework form of contract conferred negotiating powers to the Agency. It allowed Frontex to retain flexibility regarding the specification of the services required, and enhanced competitive behaviour by industrial partners as there are multiple tenders within the contract. This increased the efficiency of the procurement process, especially for the ASS contracts. The Framework contract is described in greater detail below.

A final point overarching the Frontex procurement activities is that the role expansion of the Commission into the security arena has been closely observed by academic and liberal observers. Some have criticised the Commission's aspirations and allege that industry interests lead to disregard for fundamental human rights of illegal migrants.[962] Commission decision-making activities are somewhat transparent with Parliamentary transcripts and amendments to legislation, such as the Eurosur regulation, available in

962. BIGO, D. & JEANDESBOZ, J. 2010. The EU and the European Security Industry, Questioning the 'Public-Private Dialogue'. *CEPS, IN:EX Policy Brief,* No.5.; HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.

the EU Official Journal.[963] Procurement documents are accessed on the EU Tender Electronic Daily (TED) website or via requests under right of access to documents in the EU treaties, as developed in Regulation 1049/2001.[964] Budgetary spending behaviour is further scrutinised by the European Court of Auditors who make annual reports as well as special reports on particular issues. The research found two consequences of this scrutiny and criticism. First, it transmitted humanitarian, liberal, cultural concerns for migrant safety and influenced the tone of the regulation and drivers for procurement, especially for the ASS Contract. Second, it generated caution and emphasis on efficient decision-making, partly due to the scrutiny, partly due to Frontex's care for procurement competence and thus its reputation.

A summary of events is outlined below indicating the structure of the case study chapter:

Timeline 2003 - 2015

Section 1: Creation of Frontex and Eurosur Policy

2003	Civipol publishes ' Feasibility study on the control of the European Union's maritime borders'[965]
2004	Frontex formed via EU Council Regulation 2007/2004/EC[966] as the *European Agency for the Management of Operational Cooperation at the*

963. http://eur-lex.europa.eu/legal-content/EN/HIS/?uri=CELEX:32013R1052&qid=1495883813752 Accessed May 2017

964. http://ted.europa.eu/TED/main/HomePage.do Accessed April 2018;
REGULATION (EC) No 1049/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2001 regarding public access to European Parliament, Council and Commission documents

965. CIVIPOL CONSEIL 2003. Project 114410 “Feasibility study on the control of the European Union’s maritime borders”. *In:* COUNCIL OF THE EUROPEAN UNION (ed.). Brussels.

	External Borders of the member state of the European Union. This called for the establishment of a ECN and allowed for the procurement of services
2008-2013	Eurosur Regulation discussed internally with the Commission and EU Member states

Section 2: Finalising the Eurosur Regulation and Procuring the Eurosur Communication Network (ECN)	
2010	€2m Contract for the Pilot Project awarded to GMV for the IT infrastructure including the ECN
2011	Frontex regulation revised via Regulation 1168/2011.[967] Article 8 allows for further procurement or lease of technical equipment by the agency
2013	Eurosur Regulation published to establish border surveillance system[968]
2014	€12m Framework Contract awarded to GMV for maintenance and evolution of the ECN

966. EU COUNCIL 2004. COUNCIL REGULATION (EC) No 2007/2004. Brussels.

967. EU COUNCIL 2011. COUNCIL REGULATION (EC) No 1168/2011 amending COUNCIL REGULATION (EC) No 2007/2004. Brussels.

968. EU COMMISSION 2013b. REGULATION (EU) No 1052/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the European Border Surveillance System, Eurosur. Brussels: Official Journal of the European Union.

Section 3: Procurement of the Aerial Surveillance Services (ASS) Contract	
2014	Frontex runs a pilot project for ASS
2015	April Frontex issues contractor notice for €10m ASS Contract
	July ASS Framework Contract awarded to the Consortia of: EASP Air (Netherlands); CAE Aviation s.a.r.l. (Luxembourg); Diamond-Executive Aviation Ltd (UK); Défense Conseil International (France); Vigilance BV (Netherlands); Indra Sistemas SA (Spain) ; SIA 'Meža īpašnieku konsultatīvais centrs' (Latvia)

The chapter identifies and analyses three periods in Frontex policy and procurement processes regarding the two contracts: first, the formation of the EU border monitoring policy, and the creation of the Eurosur project (2003 - 2009); second, the procurement of the Pilot phase of the ECN software, formation of the Eurosur regulation, and the transition from the Pilot phase to the Live phase of the ECN (2009 - 2015); and third, the procurement of ASS contract (2014-2015).

Evidence gathered suggests that calculus concerns for security mission fulfilment and role expansion were the dominant drivers for the procurement in the organisational context. However, data indicates that cultural drivers in relation to societal, humanitarian concerns regarding illegal migration in the macro context. Other drivers are also acknowledged to the extent that they have an impact on the procurement; these include bureaucratic standard operating procedures (SOPs) such as policy

implementation and financing arrangements. These drivers will be categorised as to whether they represent calculus or cultural drivers below.

Section 1: Creation of Frontex and Eurosur Policy (2003 - 2009)

This section identifies drivers behind the policy for cooperative border surveillance and the Eurosur regulation and infrastructure. Eurosur is a border surveillance network, a 'system of systems' which draws information from a number of sources to provide a situational picture used to monitor activity at the EU borders and enhance reaction capability.[969] The ECN infrastructure was outlined in the 2008 Commission Communication 'Examining the creation of a European Border Surveillance System (EUROSUR)'[970] and further expanded in the 2011 Impact Assessment document.[971] Information is fed into the system via a network of hubs and nodes. Under the arrangements, each member state has a National Coordination Centre (NCC). There is a Frontex hardware 'node' installed in each NCC to interface with a similar node installed in the Frontex Situation Centre (FSC).[972]

969. PAWLAK, P. & KUROWSKA, X. 2012. The fog of border. *In:* KAUNERT, C., LEONARD, S. & PAWLAK, P. (eds.) *European homeland security: a European strategy in the making?* Abingdon: Routledge. p.134

970. EU COMMISSION 2008b. Examining the creation of a European Border Surveillance System (EUROSUR) COM(2008) 68 final. Brussels.

971. EU COMMISSION 2011c. Impact Assessment accompanying the Proposal for a Regulation of the European Parliament and of the Council establishing the European Border Surveillance System (EUROSUR). Brussels.

972. Personal Interview with Gregorio Ameyugo

As referred to in Chapter Two, most EU member states national security strategies reflected concerns over illegal transnational movement. However, it was the Commission who explored options for cooperative border surveillance and policing. This led to the creation of Frontex, the Eurosur legislation and entailed the procurement of the ECN software and ASS contract.[973] The section explores how these policies expanded the mandate of Frontex and initiated the procurement of Frontex's surveillance infrastructure and capability. It demonstrates that the Commission rather than member states drove the policy. Although member state representatives agreed and authorised the process, Commission officials wrote the policy and drove consensus at the decision-making meetings.

The section first explores the origins for Frontex policy in the macro security context, including the literature that informed EU and member state actions. It then continues to consider the drivers for the policy and procurement of a surveillance capability in the organisational context. It finds that the Commission facilitated and drove the process via by meeting member state security and 'community of values' expectations.

European Security Context

From 2003 to 2009, EU member states focussed on security issues such as terrorism related to post 9/11 and the Madrid bombings.[974] During this period illegal migration across European borders, particularly from the south, was linked to terrorism[975] but also

973. EU COUNCIL 2004. COUNCIL REGULATION (EC) No 2007/2004. Brussels.

974. These were generally explored in Chapter Two with regard to EU member state National Security Strategies

975. LUTTERBECK, D. 2006. Policing Migration in the Mediterranean: ESSAY. *Mediterranean politics,* 11**,** 59-82.

associated with humanitarian challenges.[976] There was a small body of literature that addressed the concerns of illegal migration at this time.[977] For example, Lutterbeck described migrant routes through the Mediterranean and the counter measures used by member states.[978] Also, in October 2005, a Europol report focussed on organised crime and cross border crimes. It emphasised eastern routes and borders of the EU such as Albanian, Greek and Serbian borders.[979]

This section concentrates on civil security (rather than military) concerns for terrorism and cross border crime as these security concerns fall within the Commission's remit and relate to the creation of Frontex and the Eurosur regulation. During this period, two aspects are relevant for EU strategy regarding surveillance solutions. First, two influential reports made recommendations: In 2004, 'Research for a Secure Europe' was written by a 'Group of Personalities' which included politicians and industrial figures from European Industry.[980] This report built upon the 2003 European Security Strategy (ESS)[981] and referred to globalisation and the movement of people as a threat. It called for both military and civilian responses and lists missions to include border control,

976. PUGH, M. 2001. Mediterranean Boat People: a case for co-operation? *Mediterranean Politics,* 6**,** 1-20.

977. MONZINI, P. 2007. Sea-border crossings: The organization of irregular migration to Italy. Ibid.12**,** 163-184.; BALDWIN-EDWARDS, M. 2005. Migration in the Middle East and Mediterranean: A regional study prepared for the Global Commission on International Migration.

978. LUTTERBECK, D. 2006. Policing Migration in the Mediterranean: ESSAY. *Mediterranean politics,* 11**,** 59-82.

979. EUROPOL 2005. 2005 EU Organised Crime Report Public Version. The Hague.

980. BUSQUIN, P. & ERKKI, L. 2004. Research for a Secure Europe, Report of the Group of Personalities in the field of Security Research. Luxembourg: Office for the Official Publications of the European Communities.

981. EU 2003. A Secure Europe in a Better World, European Security Strategy. Brussels.

protection of critical infrastructure and disaster management.[982] The report was criticised as having an 'industrial complex' agenda,[983] but nonetheless was important for articulating concerns regarding cross border movement that the Frontex and the Eurosur regulation would later meet. In 2006, the European Security Research Agenda report had a similar theme.[984]

Second, the 7th Framework Programme (FP7) project was launched in 2007 to increase the EU's research and development activities.[985] It had a budget of over €50bn, of which €1.4bn was earmarked for security.[986] This project aimed to encourage industrial and technical development in security sectors so that the EU could compete with other nations such as the US.[987] Despite these research projects, there was little follow on procurement for security programmes, partly because the EU had little mandate in this area[988] - until the Frontex / Eurosur project. The 2011 Eurosur progress report makes explicit reference that Eurosur should refer to these efforts: 'FRONTEX should ensure that the results of research and development are continuously used for developing

982. BUSQUIN, P. & ERKKI, L. 2004. Research for a Secure Europe, Report of the Group of Personalities in the field of Security Research. Luxembourg: Office for the Official Publications of the European Communities. p.18

983. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.

984. ESRAB 2006. Meeting the Challenge: The European Security Research Agenda. *European Security Research Advisory Board Report.* Luxembourg.

985. EU COMMISSION 2016a. Commission presents its evaluation of the 7th Framework Programme for Research. Brussels.

986. EU COUNCIL 2006. Council approves EU research programmes for 2007-2013; 16887/06 (Presse 366). Brussels.

987. MÖRTH, U. 2003. Framing an American Threat: the European Commission and the Technology Gap.

988. MAWDSLEY, J. 2013b. A European Agenda for Security Technology: From Innovation Policy to Export Controls. *Flemish Peace Institute, Report.*

EUROSUR.'[989] It must be noted that most of these projects do not relate to the two contracts examined in this research but were relevant to other aspects of the Eurosur programme such as satellite and maritime surveillance.[990]

The context described above informed EU member states and Commission decision makers when considering Frontex and Eurosur policy, generating objectives to address security concerns, the humanitarian agenda, and industrial interests.

Frontex Policy

The origins of Frontex and Eurosur policy can be traced to 2001 when the Commission instigated border management policy and published a Communication that referenced coordination of European border guard operations.[991] In 2003 Civipol (a French security consultancy)[992] wrote a report that called for an integrated information system to monitor illegal migration at the EU's Maritime Borders: 'Feasibility Study on the Control of the European Union's Maritime borders'.[993] It made reference to the existing surveillance arrangements of the Spanish 'Sistema Integrado de Vigilancia Exterior' (SIVE) system, and the Finnish Vessel Traffic Monitoring Information System (VTMIS). The report estimated that a similar EU system could be set up at a cost of

989. EU COMMISSION 2011b. *Determining the technical and operational framework of the European Border Surveillance System (EUROSUR) and the actions to be taken for its establishment SEC(2011) 145 final,* Brussels.

990. FERNANDEZ, G. A. 5th International Seminar on Security and Defence in the Mediterranean, Multi Dimensional Security.

991. EU COMMISSION 2001a. Communication from the Commission to the Council and European Parliament on a common policy on illegal immigration [COM(2001) 672 final. Brussels.

992. http://www.civipol.fr/en/presentation Accessed January 2017

993. CIVIPOL CONSEIL 2003. Project 114410 "Feasibility study on the control of the European Union's maritime borders". *In:* COUNCIL OF THE EUROPEAN UNION (ed.). Brussels.

€150 million.[994] This project was not adopted, but moves to create an agency to monitor the EU's borders were in progress, and in 2004 the *European Agency for the Management of Operational Cooperation at the External Borders of the member state of the European Union* or 'Frontex' was formed and based in Warsaw, Poland.[995]

The Frontex regulation[996] stipulated that the Agency would coordinate member state efforts for border regulation and maintain the Schengen Code as a 'specialised expert body tasked with improving the coordination of operational cooperation between member states in the field of external border management.'[997] Three aspects made the Frontex regulation acceptable to member states. First, member states were clear that any security capability associated with border management would be controlled by them. Second, border control would be a civil security function rather than a military function. Third, the regulation addressed humanitarian requirements regarding the safety of migrants.

First, control of border management by member states is expressly laid out in the Frontex Regulation:

> 'The responsibility for the control and surveillance of external borders lies with the member states. The Agency should facilitate the application of existing and future Community measures relating to the management of external borders by

994. Ibid. p.87

995. EU COUNCIL 2004. COUNCIL REGULATION (EC) No 2007/2004. Brussels.

996. Ibid.

997. Ibid. Article 3

> ensuring the coordination of member states' actions in the implementation of those measures.'[998]

However, Article 8 para 3 allows for Frontex functionality and states: 'The Agency may acquire technical equipment for control and surveillance of external borders to be used by its experts for the duration of the deployment in the member state(s) in question.'[999] This was strengthened in 2011 when the regulation was amended to:[1000]

> 'The Agency may acquire, itself or in co-ownership with a member state, or lease technical equipment for external border control to be deployed during joint operations, pilot projects, rapid interventions, joint return operations or technical assistance projects in accordance with the financial rules applicable to the Agency.'

This authority for procurement authorises the Agency to perform the security functions of intelligence sharing and surveillance, not just in cooperation with member states, but also in its own right. It provides incentive for role expansion. Thus, Frontex's procurement of surveillance capability, the ECN and ASS, performed with respect to the legislation above, achieved role expansion despite member states' initial concerns to control border management. This in part was due to the Commission's alignment with acceptable strategic cultural aspects of the border surveillance function in the second and third aspects below.

Second, the civil security aspect was important as it placed the remit of border management firmly with the Commission (as opposed to the European Defence Agency

998. Ibid.

999. Ibid.

1000. Ibid. Article 7

(EDA) which is concerned with military capabilities, see Chapter Three). The Schengen Code was conceived within the civil security sphere, and any measures taken with reference to the Code at the EU borders are expressly non-military.[1001] Existing member state border management agents are mainly coast guards but some countries, such as France, Italy and Malta, have military aspects to their border management. However, the Commission was careful to emphasise the civil security elements leading to 'civil military' type solutions. An EU military capability has historically been contentious with some member states, like the UK, who focus on NATO as the region's military cooperative effort.[1002] Academic and journalist critics were also sensitive to the military aspects of the Commission's increased security role.[1003] However, the Frontex regulation meant that the function could be legitimately fulfilled within the civil security remit of the Schengen Code.[1004]

Third, amendments made to the Frontex regulation show humanitarian aspects of the role being emphasised.[1005] These amendments were important to gain political will for

1001. http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:42000A0922(02)&from=EN Accessed December 2015; NIEMENKARI, A. 2002. EU/SCHENGEN REQUIREMENTS FOR NATIONAL BORDER SECURITY SYSTEMS. *Working Paper Series No.8.* Geneva: Geneva Centre for the Democratic Control of Armed Forces (DCAF). p.6; EU COMMISSION 2011d. Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL Establishing the European Border Surveillance System (EUROSUR) COM(2011) 873 final. Brussels.

1002. CORNISH, D. P. 2006. EU and NATO: Cooperation Or Competition. Brussels: European Parliament Sub Committee on Security and Defence.

1003. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch. p.33

1004. EU COUNCIL 2004. COUNCIL REGULATION (EC) No 2007/2004. Brussels.

1005. BOETTICHER, C. U. V. 2004. REPORT on the proposal for a Council regulation establishing a European Agency for the Management of Operational Co-operation at the External Borders (COM(2003) 687 – C5-0613/2003 – 2003/0273(CNS)). *In:* COMMITTEE ON CITIZENS' FREEDOMS AND RIGHTS JUSTICE AND HOME AFFAIRS (ed.). Brussels: European Parliament.

the regulation. Thus, once concerns relating to this humanitarian aspect were addressed, further competences could be allocated to Frontex. This evidence indicates that ideas of liberal progress towards a common good, such as multilateral responsibility for migrant safety, facilitated agreement of member states for Frontex, an EU Agency, to procure equipment and to perform security functions such as intelligence sharing and aerial surveillance. While this aspect is important for societal acceptance of Frontex's increased powers, it is paradoxical in this context as it does not solve the problem of illegal migration and associated transnational crime - indeed surveillance probably encourages it. An interviewee observed that increased surveillance was not a solution to the illegal migration as this, and the increased maritime patrols, meant that 'more migrants are going to sea than ever'.[1006]

This section has demonstrated that the Frontex policy and regulation were achieved via alignment with member state security concerns but also within an acceptable strategic culture of *civil* military solutions and the Western 'community of values'. The next section considers the Eurosur policy in the same vein.

Eurosur Policy

The Frontex regulation authorised the Agency to coordinate the monitoring of the EU's borders, but member states also had to agree to the methods and principles by which they could share border information. In 2005 the EU Council authorised Frontex to carry out two feasibility studies[1007] for Eurosur funded by the External Border Fund:

1006. Personal Interview with Gregorio Ameyugo

1007. EU COUNCIL 2005. Presidency Conclusions, BRUSSELS EUROPEAN COUNCIL 15/16 DECEMBER 2005. Brussels.

Bortec and MEDSEA.[1008] Some, slightly critical, analysis has been carried out on the costings of these studies,[1009] but for this research it is pertinent in that these studies led to the specification of National Coordination Centre (NCC) infrastructure for the ECN.[1010]

In 2008 the Commission issued a Communication that examined the setting up of Eurosur in its 'Stockholm Programme'.[1011] The Communication ascertained three objectives for border surveillance that met with member state security and strategic cultural concerns: first, to reduce illegal immigration via the provision of timely and reliable information; second, to contribute to the prevention of cross border crime; third, to enhance search and rescue capability and prevent the loss of life during migration.[1012] Thus the Commission, backed by the political support of member states, drove the creation of Eurosur.

The Commission document set out three phases and the next steps for the implementation of Eurosur.[1013] Phase 1, is relevant to this case study and entailed 'Upgrading and extending national border surveillance systems and interlinking national

1008. LODGE, A. 2010. Beyond the Frontiers, Frontex: the First Five Years. Poland: Frontex.

1009. HAYES, B. & VERMEULEN, M. 2012. *Borderline: The EU's New Border Surveillance Initiatives: Assessing the Costs and Fundamental Rights Implications of EUROSUR and the" Smart Borders" Proposals: a Study by the Heinrich Böll Foundation*, Heinrich-Böll-Stiftung.

1010. EU COMMISSION 2011c. Impact Assessment accompanying the Proposal for a Regulation of the European Parliament and of the Council establishing the European Border Surveillance System (EUROSUR). Brussels. p.25

1011. EU COMMISSION 2008b. Examining the creation of a European Border Surveillance System (EUROSUR) COM(2008) 68 final. Brussels.

1012. Ibid. para 2.2

1013. Ibid.

infrastructures in a ECN'.[1014] The other two phases were: Phase 2, targeting research and development to improve the performance of surveillance tools and sensors (e.g. satellites, unmanned aerial vehicles), and developing a common application of surveillance tools; Phase 3, to create a Common Information Sharing Environment (CISE) between the relevant national authorities. The Communication expanded the three phases into 8 steps of implementation. Phase 1 consisted of three steps, which included the creation of the ECN that would link surveillance infrastructure between member states. This provided the policy behind the ECN Contract analysed below.[1015] Step 2 entailed the procurement of ECN software that linked member states. An Impact Assessment of Eurosur,[1016] that accompanied the Communication, outlined the financing arrangements. This was important for the feasibility of the project and indicated that there were no financing implications for member states.[1017] Thus the Commission continued to drive the process forward by meeting member state concerns for cost and implementation.

The 2009 Eurosur progress report revealed that member states had agreed, in principal, to the Eurosur regulation.[1018] While member states controlled the final approval of the Eurosur regulation, the Commission's influence and control over Eurosur and Frontex policy was apparent via three aspects: providing the bureaucratic processes; aligning

1014. Ibid.

1015. Ibid.

1016. EU COMMISSION 2011c. Impact Assessment accompanying the Proposal for a Regulation of the European Parliament and of the Council establishing the European Border Surveillance System (EUROSUR). Brussels.

1017. Ibid.

1018. EU COMMISSION 2009. REPORT ON PROGRESS MADE IN DEVELOPING THE EUROPEAN BORDER SURVEILLANCE SYSTEM (EUROSUR) SEC(2009) 1265 final. Brussels: EU Commission.

with member state cultural concerns; and providing the financial means to realised the project.

First, the Commission drove the drafting of the policy papers, both in process and via the charismatic leadership of the Policy Officer for Eurosur, Oliver Seiffarth.[1019] He is referred to as the 'father' of Eurosur,[1020] and oversaw the drafting of the Eurosur regulation and agreement of the member states. The documents referred to above provide evidence for the Commission driving Eurosur policy and this is backed up by interviews held at Frontex. A Frontex official commented that the Commission dominated the process, and that Eurosur was very much a Commission initiative 'because they have their own interests for Eurosur'.[1021] Another interviewee noted that if Frontex had not taken the role, the European Maritime Safety Agency (EMSA) would have fulfilled it, indicating the Commission's determination to organise the functionality via one of its Agencies.[1022] The Eurosur Regulation later stipulated that Frontex had to provide the network.[1023]

Second, the Commission facilitated the agreement of member states by addressing cultural concerns regarding civil security and humanitarian issues in the 2008

1019. Personal Interview with 008, 005 and Ivan Inchovsky

1020. Personal and Phone Interviews 008, 005, Gregorio Ameyugo

1021. Personal Interview with 003

1022. Ibid.

1023. EU COMMISSION 2013b. REGULATION (EU) No 1052/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the European Border Surveillance System, Eurosur. Brussels: Official Journal of the European Union. Art 7

Communication objectives for Eurosur mentioned above.[1024] An interviewee observed that member states and the Commission allocated money to Frontex as a salve to societal concerns, passing the burden onto Frontex.[1025] This represents a cultural, ideational motive, as the need to save lives does not address identified, fundamental threats.

Third, the Commission ensured that finance the Eurosur programme was readily available via multiple budgets. This was important for member states who did not want additional financial obligations associated with the programme.[1026] Finance for border surveillance was available via Frontex budgets (authorised through the PoW), either via grants or direct procurement, and also from various EU sources including the EU's External Borders Fund, which totalled €1.8bn between 2007 - 2013.[1027] The 2007 - 2013 Internal Security Fund of €4.6bn could also be used for Frontex operations and functionality.[1028]

The study finds therefore, that the Commission drove Frontex and its Eurosur policy. Member states were concerned about illegal migration and transnational crime, but did not instigate the policy. Rather, evidence gathered from regulation amendments and

1024. EU COMMISSION 2008b. Examining the creation of a European Border Surveillance System (EUROSUR) COM(2008) 68 final. Brussels. para 2.2

1025. Personal Interview with Gregorio Ameyugo

1026. Phone Interview with 008

1027. SEIFFARTH, O. 2011a. The Development of the European Border Surveillance System. *In:* BURGESS, J. P. & GUTWIRTH, S. (eds.) *A Threat Against Europe?: Security, Migration and Integration.* ASP/VUBPRESS/UPA.

1028. HELLER, C. & JONES, C. 2014. Eurosur: Saving Lives or Reinforcing deadly borders? *Statewatch,* Vol 23 no 3/4.

interview data indicates that member states sought to constrain the Commission role.[1029] The Commission overcame these misgivings by meeting member state calculus concerns about the purpose and cost of the Eurosur solutions, and their cultural concerns regarding the civil nature of the security solution and treatment of migrants. Previous chapters have indicated that the Commission had calculus role expansion motives in the security arena.[1030] However, alternative rationales for the Commission driving Frontex and Eurosur policy include industrial and technical imperatives, where the Commission could use policy to develop and procure sophisticated surveillance technology to compete with other nations, such as the US, thus meeting recommendations in the European Group of Personalities and ESRAB reports. Evidence for industrial and technical imperatives will be considered in the procurement outcomes below. The next section considers the processes and outcomes of the finalised Eurosur regulation in 2013, and the procurement of the ECN.

Section 2: Finalising the Eurosur Regulation and Procuring the ECN (2009 - 2015)

This section follows the implementation of Eurosur policy and the procurement of the Eurosur Communication Network (ECN) in four stages. First, the agreement of member states to the specification and format of the ECN. Second, this happened concurrently

1029. BOETTICHER, C. U. V. 2004. REPORT on the proposal for a Council regulation establishing a European Agency for the Management of Operational Co-operation at the External Borders (COM(2003) 687 – C5-0613/2003 – 2003/0273(CNS)). *In:* COMMITTEE ON CITIZENS' FREEDOMS AND RIGHTS JUSTICE AND HOME AFFAIRS (ed.). Brussels: European Parliament.; Personal Interview with 005

1030. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.

with the final drafting of the Eurosur regulation, which was published in 2013. Third, decision-making related to the Pilot phase contract (Pilot) for the ECN software, a €2 million contract awarded in 2010.[1031] Fourth, the Pilot and the Eurosur regulation then significantly informed the procurement of the €12 million Live phase 'Framework contract for the maintenance and evolution of the Eurosur network' in 2014.[1032] Thus, in an unusual move, software from the Pilot ECN was merely adapted for the Live phase, rather than rebuilding the software with reference to the Pilot prototype.[1033] The study finds that this was due to timing constraints as the Eurosur regulation came into force, but that the migration crisis and the threat of rival systems also heightened urgency for the final contract solution.

The ECN contract was one of the largest procurements carried out by the Agency since its inception. The research found that Frontex and Commission actors drove agreement to the Eurosur regulation, the initial Pilot specification and procurement of the ECN software. The Commission's incentives included role expansion, expanding and establishing its civil security remit, especially in the context of rival systems such as MARSUR.[1034] They achieved their objectives by meeting member state concerns on the emphasis on Frontex's coordination role, diluting intelligence sharing parameters to acceptable levels for national border agencies, streamlining procurement processes so

1031. FRONTEX 2010b. Invitation to the Open Tender procedure No: Frontex/OP/98/2010-Eurosur Big Pilot Project. Warsaw.

1032. FRONTEX 2012. Contract Notice: framework contract for maintenance and evolution of the Eurosur network. TED.; FRONTEX. 2014c. *GMV contract notice for Eurosur* [Online]. Available: http://ted.europa.eu/udl?uri=TED:NOTICE:17853-2014:TEXT:EN:HTML&tabId=1 accessed December 2014 [Accessed December 2014].

1033. Phone and Personal Interview with 008, 003

1034. https://www.eda.europa.eu/what-we-do/activities/activities-search/maritime-surveillance-(marsur) Accessed April 2018

that member state decision-making and financial burdens were low, and aligning with Western 'community of values' in the Eurosur legislation.

Security and Organisation Context

In the period preceding the ECN and ASS contracts, EU member states became increasingly concerned with the rise of illegal migration, and also the loss of life resulting from the dangerous routes and methods used by migrants to come to Europe.[1035] European member state security actors increasingly mentioned strategic concerns for the rising level of illegal migration.[1036] The Syrian conflict continued to drive people from their homes and many wanted to reach the relative safety of Europe[1037] via the porous borders in Turkey and Greece.[1038] By 2014 this represented the largest population movements in Europe since the conflicts in the former Yugoslavia in the 1990's.[1039] References to Frontex in the context of these increased movements were frequent and led to an increase in Frontex's resources linked to an expectation related to Frontex's role in the crisis.

Security concerns for a rise in transnational crime and terrorism arose from the migration crisis, but another driver for increased monitoring of EU borders was a

1035. HELLER, C., PEZZANI, L. & STUDIO, S. 2011. Left to Die Boat. *In:* FORENSIC ARCHITECTURE (ed.). London: Centre for Research Architecture, Goldsmiths College.

1036. http://www.dw.com/en/germany-grapples-with-record-number-of-illegal-refugees/a-18367682 Accessed March 2017

1037. OECD 2015. Is this humanitarian migration crisis different? *Migration Policy Debates*. Paris: OECD.

1038. EUROPEAN COMMISSION 2014b. The final implementation report of the EU Internal Security Strategy 2010 - 2014 COM(2014) 365 final. Brussels.

1039. OECD 2015. Is this humanitarian migration crisis different? *Migration Policy Debates*. Paris: OECD.

cultural, ideational emphasis on the plight of the migrants due to the dangerous routes used to gain access to Europe. This concern reflected EU ideals of a civilised, progressive society, related to the concept of the EU as a community of values.[1040] The increasing emphasis on the plight of migrants was reflected in member state politics, such as the Maltese Prime Minister's evocative reference to the Mediterranean as becoming 'a cemetery'.[1041] Influential press and academic literature also contributed to the discourse with accounts such as the 'Left to Die' report.[1042] This enhanced political will for surveillance programmes to monitor these routes, and again led to calls for increased Commission and Frontex led activity in transnational border areas such as the Mediterranean migration routes from Libya, or from Turkey.

As noted above, the humanitarian logic ran counter to the rational, strategic concerns of transnational crime and terrorism arising from this illegal population movement, as increased European surveillance activity was an incentive for migrants to make these journeys in order to be found by the surveillance patrols.[1043] Therefore surveillance does not present a solution to the problem of illegal migration; rather it exacerbates it and counters member state efforts to stem the tide of movement from the South and East of the Mediterranean.

1040. PERKOWSKI, N. 2012. A normative assessment of the aims and practices of the European border management agency Frontex. Oxford: Refugees Studies Centre.

1041. http://www.bbc.com/news/world-europe-24502279 Accessed March 2017

1042. HELLER, C., PEZZANI, L. & STUDIO, S. 2011. Left to Die Boat. *In:* FORENSIC ARCHITECTURE (ed.). London: Centre for Research Architecture, Goldsmiths College.; LAWRENCE, M. 2014. Helping Europe with its Sea. Small Wars Journal.; RIJPMA, J. J. 2010. Frontex: successful blame shifting of the Member States? *Elcano Newsletter*, 6.

1043. Personal Interview Alexander Dalli; FRONTEX 2017. Risk Analysis 2017. Warsaw. p.32;

A related cultural factor that affected the policy and procurement surveillance capabilities was the concern for migrant's fundamental rights. Observers and academics were increasingly critical of Commission and Frontex solutions to the migration problem, with allegations of militarised response to the situation, and alliance with industry actors rather than considering NGO led solutions.[1044] This literature alleged that member state security and corporate profit interests superseded the concern for fundamental rights of the migrants and betrayed the values of the EU community. The Commission and Parliament tried to address these cultural concerns, as seen in the Frontex regulation amendments referred to in the sections above.[1045] Frontex also made repeated allusions to its humanitarian efforts in an attempt to meet member state requirements and to respond to the criticisms.[1046] An additional consideration during the procurement was therefore the preservation of the reputation of the Agency. This made Frontex cautious when proceeding with surveillance tasks and even partaking in research such as this. It meant that concern for a successful and efficient procurement was foremost in the Agency's objectives, due to the scrutiny that it was likely to receive.

Regarding organisational drivers, the research found evidence that Frontex was initially reluctant to expand its workload and change its work patterns. It therefore concluded

1044. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; BIGO, D. & JEANDESBOZ, J. 2010. The EU and the European Security Industry, Questioning the 'Public-Private Dialogue'. *CEPS, IN:EX Policy Brief,* No.5.; ANDERSSON, R. 2012. A Game of Risk, Boat Migration and the Business of Bordering Europe. *Anthropology Today,* 28**,** 7-12.

1045. BOETTICHER, C. U. V. 2004. REPORT on the proposal for a Council regulation establishing a European Agency for the Management of Operational Co-operation at the External Borders (COM(2003) 687 – C5-0613/2003 – 2003/0273(CNS)). *In:* COMMITTEE ON CITIZENS' FREEDOMS AND RIGHTS JUSTICE AND HOME AFFAIRS (ed.). Brussels: European Parliament.

1046. AAS, K. F. & GUNDHUS, H. O. I. 2015. Policing Humanitarian Borderlands: Frontex, Human Rights and the Precariousness of Life. *The British Journal of Criminology,* 55**,** 1-18.

that drivers for the additional security remit and the ECN stemmed from the Commission. The Commission encouraged the implementation of Eurosur policy, and issued documents centrally. Further, while the EU had a civil security remit related to Schengen, the military surveillance solution that had been supplied by MARSUR, and then later Operation SOPHIA,[1047] provided a level of competition for coordination of EU border intelligence.[1048] This gave the Commission additional drivers to provide a solution for coordinating border intelligence that could beat other rival solutions, including CISE that was delegated to DG MARE.[1049]

Procurement of the ECN Infrastructure

Frontex had to procure and specify ECN software for exchange of border information where both the form and content were acceptable to member states. Throughout 2009 to 2010, the Commission gained member state assent for three aspects. First, agreement to the principle of sharing data and to participate in the ECN; second, agreement to the data content to be exchanged via the ECN; and third, the format of the ECN software infrastructure. This inevitably involved compromise, especially where border agencies were protective of the information that they collected.

1047. THARDY, T. 2015. Operation Sophia, Tackling the Refugee Crisis with Military Means. *European Institute for Security Studies*.

1048. CARRERA, S. & DEN HERTOG, L. 2015. Whose Mare? Rule of law challenges in the field of European border surveillance in the Mediterranean. CEPS Liberty and Security in Europe No. 79/January 2015.

1049. EU COMMISSION 2011b. *Determining the technical and operational framework of the European Border Surveillance System (EUROSUR) and the actions to be taken for its establishment SEC(2011) 145 final,* Brussels. p.6

http://www.eucise2020.eu Accessed January 2018

First, the Commission had to organise member state participation in the Eurosur project. This required a certain amount of persuasion. The first six member states to commit included those with greatest strategic interest in the project. This included Poland (where Frontex was based), Spain (forefront of both the migration problem and industrial solutions for surveillance), Italy (at the forefront of the migration problem), Slovakia, France (industrial interests) and Finland.[1050]

Member state discussion centred on the extent of their obligations under the Eurosur regulation. Principally, the Commission and Oliver Seiffarth drove progress and agreement to the proposals. The strategy was to gain momentum so that the others followed this direction and consensus was found. A Frontex official observed that he was 'really pushing' and talking bilaterally to obtain single state agreement before taking an issue to a broader audience of member states. Strategic[1051] tactics were used by the Agency to gain momentum and support for the Pilot. Where non-participating member states began to be interested and to attend the Eurosur meetings: 'I sat them in the second row to make perfectly clear, that I was discussing with four. All the others were sitting behind.'[1052] Progress of the programme was well organised by Frontex and the Commission and agreement to the Eurosur regulation proceeded efficiently according to the policy papers issued.[1053]

1050. Personal Interview with Gregorio Ameyugo

1051. Personal interview with 005

1052. Ibid.

1053. SEIFFARTH, O. 2011b. Proposal for a Regulation Establishing Eurosur. Brussels: EU Commission.;

In 2010, the Eurosur project was divided into workgroups that focussed on its technical framework (associated with the infrastructure) and the operational framework (the rules and workflows for the sharing of information). These working groups consisted of member states, European Agencies such as Frontex, EMSA, and the Commission.[1054] Thus the Commission bureaucracy and officials ensured that momentum was maintained and that progress was made towards the regulation and subsequent procurement of the ECN.

The second stage was to secure consensus regarding the data content shared via the ECN. Difficulties arose where different member state agencies controlled border surveillance information and did not want to share their responsibilities and power base linked to this information. There was only one NCC per country, but there were often multiple border agencies who dealt with different aspects of border management, such as land borders, sea borders and airport borders. Therefore border guard representatives in these meetings were anxious to control the information that they generated. For example, in France border surveillance is traditionally carried out by the French Navy in the Maritime area, but by the police for the land and air borders.[1055] Frontex initially engaged with French border surveillance teams via the Department of International Affairs and the national police rather than the Navy. Therefore there were inter-departmental tensions as to which service would maintain the NCC. An official commented that there were different French agency representatives at every meeting.[1056]

1054. SEIFFARTH, O. 2011a. The Development of the European Border Surveillance System. *In:* BURGESS, J. P. & GUTWIRTH, S. (eds.) *A Threat Against Europe?: Security, Migration and Integration.* ASP/VUBPRESS/UPA. p.148

1055. Personal Interview with 005

1056. Ibid.

This inter service tension between member state border agencies led to restrictions in the form and amount of intelligence that they were prepared to share, both internally and externally. Officials tasked with initiating the ECN Pilot phase, corroborate this when describing the process of defining the parameters of the shared surveillance data. National representatives were asked for not just *what* information they gathered but what they felt that were *able* to share.[1057] The impact of this was that there was agreement to share only low levels of intelligence data on the ECN.[1058]

The third stage was agreement to the format of the ECN infrastructure. Officials noted that the ECN architecture was accepted by member states because the software remained external and information gathered was 'push' only, i.e. submitted by the member state border agencies rather than Frontex accessing national systems.[1059] Decision-making took place between member state border surveillance agencies and the Commission (DG MHA), with representatives from Frontex. Member states were primarily concerned with control of data input. This overrode any technical concerns, so a technical imperative was certainly not a driver for procurement of the Pilot phase software. A Frontex official commented that the infrastructure was *not* 'the most modern set up' as the member states wanted to retain control over the information that they shared with Frontex.[1060] This demonstrates that member state reticence impacted the form of the ECN and restrained the sophistication of the technology used. Thus the drivers for the member state agreement to the Eurosur at this point was a bureaucratic calculus to maintain information and the related power. This negated any presence of a technical

1057. Personal Interview with Gregorio Ameyugo

1058. Ibid

1059. Ibid

1060. Personal Interview with 005

imperative for the procurement and led to a compromised outcome for the specification of the software infrastructure.

A further factor in the member state acceptance of the ECN was the financial independence of the scheme. Member states were keen to avoid any financing obligations.[1061] Therefore they were pleased to find that Frontex supplied all the hardware associated with setting up the NCC and that the funding considerations for the ECN were being found at the Commission level.[1062] Here, the strategic prominence of Frontex' border management role meant that allocation of funds was a priority at the DG MHA level, so budget was allocated centrally via the PoW.[1063] Second, there were additional funds available that supported the Eurosur infrastructure under the External Borders Fund, a limited amount from FP7 funding, and the later arrangements of the Internal Security Funds.[1064]

1061. Phone Interview with 006

1062. Personal Interview with Gregorio Ameyugo

1063. FRONTEX 2010a. Frontex Programme of Work 2011. Warsaw. p.65; FRONTEX 2011. Frontex 2012 Programme of Work. Warsaw. p.48

1064. SEIFFARTH, O. 2011a. The Development of the European Border Surveillance System. *In:* BURGESS, J. P. & GUTWIRTH, S. (eds.) *A Threat Against Europe?: Security, Migration and Integration.* ASP/VUBPRESS/UPA. p.149; EU COMMISSION 2007a. DECISION No 574/2007/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 May 2007 establishing the External Borders Fund for the period 2007 to 2013 as part of the General programme 'Solidarity and Management of Migration Flows'. Brussels.; EU COMMISSION 2011c. Impact Assessment accompanying the Proposal for a Regulation of the European Parliament and of the Council establishing the European Border Surveillance System (EUROSUR). Brussels.; EU COMMISSION 2014. REGULATION (EU) No 515/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 establishing, as part of the Internal Security Fund, the instrument for financial support for external borders and visa and repealing Decision No 574/2007/EC. *In:* DG MIGRATION AND HOME AFFAIRS (ed.). Brussels.

From January 2009 to January 2010, Oliver Seiffarth commissioned a feasibility study, funded under the External Borders Fund: 'to develop the key concepts of EUROSUR, in particular, the technical and management concepts for establishing or further developing national border surveillance systems and national coordination centres.'[1065] It was awarded to the German company, ESG, who then subcontracted to EADS, SELEX, Thales.[1066] The study used an academic consultant, SECUNET (University of the German Federal Army). Some literature regarding EU border surveillance solutions alleges that private sector industrial pressure led to border surveillance policy and the procurement of the Eurosur functionality.[1067] However, the research concludes that the ECN Pilot outcomes do not demonstrate evidence of inefficient juste retour or lobbying from this feasibility stage.

The Commission made budgetary allocations for the ECN Pilot centrally, thus avoiding any 'juste retour' or member state leverage.[1068] Further, overt member state promotion

1065. EU COMMISSION 2011b. *Determining the technical and operational framework of the European Border Surveillance System (EUROSUR) and the actions to be taken for its establishment SEC(2011) 145 final,* Brussels. p.5

1066. Ibid. p.5

1067. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch. HAYES, B. & VERMEULEN, M. 2012. *Borderline: The EU's New Border Surveillance Initiatives: Assessing the Costs and Fundamental Rights Implications of EUROSUR and the" Smart Borders" Proposals: a Study by the Heinrich Böll Foundation*, Heinrich-Böll-Stiftung.; MARTIN, M. 2013. 'Trust in Frontex': The 2013 Work Programme. *Statewatch*.; AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.; ANDERSSON, R. 2012. A Game of Risk, Boat Migration and the Business of Bordering Europe. *Anthropology Today,* 28**,** 7-12.

1068. EU COMMISSION 2011b. *Determining the technical and operational framework of the European Border Surveillance System (EUROSUR) and the actions to be taken for its establishment SEC(2011) 145 final,* Brussels.

of national industry runs counter to the culture of the Commission and Frontex.[1069] When questioned on member state sponsorship for contractors, Frontex officials emphasised the level playing field between member states related to Commission contracts, observing that it would be an 'unimaginable situation' for member states to promote national contractors.[1070]

Finally, scrutiny of Frontex by academic and journalist communities would not support member state sponsorship. There was some evidence that industrial actors lobbied the Commission and Frontex directly before the ECN Pilot contract award. A Frontex official noted the industry lobbying activity at this point, where Selex, GMV, and Thales all demonstrated potential infrastructure arrangements:[1071] 'they did [a] mini pilot, and then they also called Oliver frequently and wanted to know the status. But I think that Thales was like the most pushy of all of them.'[1072] The research concludes that as the Pilot contract was awarded to GMV, while the contractors from the feasibility study, such as Thales, did not gain from their lobbying activities.

The tender process is a bureaucratic, standard operational procedure. The €2 million Pilot contract was awarded through an Open Tender procedure and the Invitation to Tender was issued in April 2010.[1073] While Commission officials and member states were involved with the policy decisions for the ECN, the Frontex procurement team

1069. Personal Interview with 003

1070. Ibid

1071. Personal Interview with 005

1072. Ibid

1073. FRONTEX 2010b. Invitation to the Open Tender procedure No: Frontex/OP/98/2010-Eurosur Big Pilot Project. Warsaw.

carried out procurement decisions.[1074] The Commission's Open Tender Procedure[1075] is a generic, transparent process that can be tracked online via the EU Official Journal and the TED[1076] website where notices are published. Further, official requests can be made for the Tender Dossier documents under the EU Regulation 1049/2001.[1077] These documents are not classified and easy to obtain.

Contract notices are issued making an invitation to tender followed by an evaluation and contract award according to a strict scoring schedule.[1078] The Frontex Procurement team with the Research and Development Unit (RDU), tasked with specifying the assets or capability required, wrote tender documents and specifications. For the Live ECN the tender documents were also written with the Information, Communications and Technology (ICT) Unit.[1079] For the ASS contract examined in the next section, RDU

1074. Personal Interview with 003, 004, Francis Laruelle

1075. https://www.achilles.com/images/locale/en-EN/buyer/pdf/Achilles-EU-Brief-Guide-to-Public-Sector.pdf Accessed January 2017

1076. Tender Electronic Daily

1077. EU COMMISSION 2001b. REGULATION (EC) No 1049/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2001 regarding public access to European Parliament, Council and Commission documents. Brussels.

1078. "Open" procedure: Under the open procedure any supplier may submit a tender. Each submission is evaluated to determine the tenderer's suitability, its capability and capacity and all tenderers who meet the basic capability and capacity requirements have their tendered proposals fully evaluated against the published award criteria. This procedure would be appropriate where the number of suppliers is quite low. The Process in generally as follows:

- Tender Dossier issued by Frontex which includes: Description of the contract with requirements
- Tenderer Reply to descriptive document – assessed by the Frontex Evaluation Committee
- Frontex request for clarifications from the tenderers
- Frontex publishes the final tender documentation
- Tenders submit the final proposals which include a Financial proposal and a Technical proposal submitted to the Finance and Procurement Team

1079. Personal Interview with 004

and the Pooled Services Unit wrote them.[1080] A Tender Dossier is issued containing Tender Specification Document (which explains the evaluation and scoring for the contract award) and a draft contract. An Evaluation Committee (EC) is formed for each contract, for the ECN contract EC there were 4-5 people from Operations, from ICT, and from the Procurement teams.[1081] Thus the procurement process is Frontex led with little intervention from member state or industrial representatives. The ECN Pilot contract was awarded in November 2010 to the Spanish contractor, GMV.[1082]

The research found no evidence of member state sponsorship or lobbying at the tender and contract award stage. Industrial competition for the Frontex contracts was fierce as working with the Commission is prestigious and could lead to other contracts with member states or the Commission.[1083] There are high levels of complaint from contractors who fail to win the contract award, and even industrial spying on those companies fulfilling the contracts.[1084] This increases Frontex's objectives for fairness regarding procurement processes, and reduces the chances of member state sponsorship or corporate lobbying. The decision for GMV was actually challenged by a Greek contractor, Evropaïki Dynamiki, who failed to win the contract.[1085] The European Court

1080. Ibid

1081. Personal Interview with Francis Laruelle

1082. EU COMMISSION 2011b. *Determining the technical and operational framework of the European Border Surveillance System (EUROSUR) and the actions to be taken for its establishment SEC(2011) 145 final,* Brussels. p.6; Personal Interview with Francis Laruelle

1083. Personal Interview with Peter Bondar

1084. Ibid

1085. COLLINS, A. 2015. JUDGMENT OF THE GENERAL COURT (Sixth Chamber), regarding APPLICATION, first, for annulment of the decisions to reject the applicant's bids for the call for tenders Frontex/OP/87/2010 relating to a framework contract for 'ICT Services' in the field of management technologies and information security (OJ 2010/S 66-098323) and for the call for tenders

of Justice examined the evaluation process and ruled that Frontex's evaluation committee had fairly evaluated the contractor's bid.[1086] The ruling describes the process in some detail, demonstrating that the decision-making fairly followed the procurement procedure rules. Thus, with Frontex officials leading the procurement process, organisation objectives for fairness and cost efficiency could be met, with little distraction from member state or industrial interests.

The Framework Contract used for the ECN Pilot enhanced the flexibility and efficiency of the contract specification, lending negotiating power to Frontex for each aspect of the software development. A Framework Contract is an instrument for fast, transparent recruiting of services that are regularly required.[1087] They are mostly multi-year contracts where companies become 'preferred suppliers' for so-called 'Lots', which are the required services. For the ECN Pilot contract, GMV were the only 'preferred supplier' but in the ASS contract below, six preferred suppliers were chosen. Procedures vary between Framework contracts, but typically each Lot is serviced via a Request for Services (RfS), where contractors submit an offer for service provision. The time between the RfS and the deadline to submit an offer is short, often not longer than two weeks. For the ECN, the Framework contract meant that the specification could be altered for each RfS, so decisions were not front-loaded with the Contractor.[1088] Thus,

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Frontex/OP/98/2010 concerning the Eurosur big pilot project in the field of information technologies and communications (OJ 2010/S 90-134098), and also of all associated decisions, including the decisions to award the contracts to other tenderers, and, secondly, for damages for the harm allegedly sustained as a result of the contracts being awarded to those tenderers,. Luxembourg: European Court of Justice.

1086. Ibid. para 101 - 161

1087. Adapted from http://ec.europa.eu/europeaid/funding/framework-contracts_en Accessed December 2016

1088. Personal Interview with Francois Laruelle

as the software was developed, Frontex was able to control and change its specification to suit evolving requirements without involving adjustment charges (which would have occurred in a front loaded contract).

During 2011 the Frontex RDU team worked with GMV and member states to implement the Pilot contract and specify the parameters for the Live ECN. The Pilot revealed two difficulties with the development of the Network software: member state disagreements and Frontex internal tensions. These were overcome with GMV's patience and Commission tenacity in the development of the ECN. First, the GMV team had to work with the member state NCCs to ensure that they could interface with the Frontex system, this was a difficult process, creating new intelligence sharing arrangement with member states as this involved multiple communications and approvals before any progress could be made.[1089] Second, there is anecdotal evidence that some Frontex departments were reticent to adopt new work patterns and roles as required by the Eurosur regulation.[1090] This further indicates that Frontex staff did not seek increased security roles of gathering and dissemination of intelligence, but rather the Commission encouraged the Agency to widen its remit. Industrial input was present in the development of the solution, but did not affect the overall specification and form of the ECN beyond the objectives of the member states and Frontex.

The research concludes that the Commission proffered the ECN as a solution for member state security concerns, but the low levels of information exchange and technical sophistication of the solution indicated that member state objectives for

1089. Personal Interview with Luis Manuel Cuesta

1090. Personal Interview with Gregorio Ameyugo

security or technical imperatives were not strong in the decision-making process. The tender and contract award stage further demonstrates the lack of industrial or technical imperatives behind decision-making. This would indicate that the main driver behind the ECN specification and Pilot procurement was the Commission's role expansion and Frontex' objectives for a fair, efficient and transparent procurement process.

The Live Phase

In 2012 there was a sense of urgency for the Live ECN, due to the increasing migration crisis and imminent Eurosur legislation, which was to be published in early 2013.[1091] The inclusion of the ECN in the Eurosur Regulation meant that it became a legal requirement to be provided by Frontex and complied with by member states.[1092] Further, the prospect of rival information gathering systems provided incentive to make Eurosur live.[1093] Therefore in early 2012, Frontex prepared to move the ECN into its Live phase. The process was unusual in that the Pilot was directly adapted to the Live software. Thus, rather than building a clean new software that incorporated the lessons learned, the existing software had to be adapted for the Live requirements. This was difficult for the contractor, GMV, who were given six months to adapt the prototype to a

1091. FRONTEX 2013. Purchase of aerial border surveillance service for the EU external land borders. Warsaw.

1092. EU COMMISSION 2013b. REGULATION (EU) No 1052/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the European Border Surveillance System, Eurosur. Brussels: Official Journal of the European Union. Art 4 Para 1(c); Art 7 et al

1093. CARRERA, S. & DEN HERTOG, L. 2015. Whose Mare? Rule of law challenges in the field of European border surveillance in the Mediterranean. CEPS Liberty and Security in Europe No. 79/January 2015.

live system.[1094] It was suboptimal for the efficiency of the Live ECN but meant that Commission and Frontex objectives for a timely Live phase could be met.

This section also demonstrates the care taken by Frontex to avoid allegations of bias or lack of integrity in its choice of contractors, an example of external scrutiny affecting organisation behaviour. The Open Tender process was carried out in a similar fashion to the Pilot tender. In December 2012 Frontex issued a notice for the Live ECN tender on the TED system.[1095] Thirty-five companies responded and these were reduced to a shortlist of five.[1096] The five companies included GMV, but in an unusual move, Frontex made sure that other companies, which had not been involved in the Pilot, had equal access to the Pilot software. A Frontex official commented that they were keen to avoid criticism and the reputational risk of a court case after their experience with the Pilot tender process.[1097] All the technical information related to the Pilot software was released, including the technical designs and architecture.[1098] The continuation with GMV was not assured, as there were internal tensions as to how the infrastructure would be implemented.[1099] This process demonstrated Frontex's priority for transparency and awareness of public scrutiny regarding the award of the ECN contract.

Upon award of the Live Phase, GMV observed that there were further difficulties due to interdepartmental friction within Frontex, firstly with the technological aspect of the

1094. Personal Interview with Luis Manuel Cuesta

1095. FRONTEX 2012. Contract Notice: framework contract for maintenance and evolution of the Eurosur network. TED.

1096. Personal Interview with 004

1097. Personal Interview with 003

1098. Personal Interview with Luis Manuel Cuesta

1099. Ibid

programme, where the ICT department had not been involved in the initial technical build of the software, but also with new working practices associated with the Eurosur regulation. The Frontex team were unfamiliar with new working practices and some departments resented the additional work.[1100] Additionally, ICT did not like the original software language that the Pilot used, which had been specified by the RDU.[1101] The main driver through these difficulties was the patience of GMV and the requirements of Eurosur regulation for the implementation of the ECN. Thus the procurement of the Live phase was driven by Frontex procurement teams and Commission urgency to get the legally required Network into place, even with departmental concerns and contractor observations that more time would be optimal.

This section examined the procurement of the ECN within the macro context of EU member state security expectations, and the micro organisation context of the Commission and Frontex. Eurosur policy and procurement processes took place in a scrutinised, pressurised environment, driven by calculus, security concerns concerning the migration crisis, and cultural, humanitarian concerns regarding the safety and fundamental rights of migrants. The Commission had objectives for establishing its security role, especially driven by competing data gathering systems such as MARSUR and the future CISE.[1102] These objectives were realised by the bureaucratic processes that facilitated the procurement by funding, form of contract and driving forward

1100. Personal Interview with Gregorio Ameyugo

1101. Personal Interview with Gregorio Ameyugo, and Francois Laruelle

1102. CARRERA, S. & DEN HERTOG, L. 2015. Whose Mare? Rule of law challenges in the field of European border surveillance in the Mediterranean. CEPS Liberty and Security in Europe No. 79/January 2015.

acceptable legislation. Organisation scrutiny by commentators, contractors and internal audit processes provided further discipline for efficient processes by Frontex.

The evidence indicated that the decision makers for the ECN policy were Commission officials who drove the legislation process for the Eurosur Regulation and coordinated the initial specification decision-making meetings for the ECN. The rapid adoption of the Eurosur policy and regulation drove the pace of the procurement of the ECN software and provided urgency for the transition of the Pilot to the Live Phase. This altered the balance of drivers away from technical aspects of the software to timeliness of the implementation, reflecting the Commission's objectives for role expansion. The research found that member state focus was on the intelligence sharing aspect of the ECN. Thus some bureaucratic politics dynamics led to a compromised software solution so that member state border agencies could retain control over surveillance information.

Data gathered indicated some external input from industrial personnel, and anecdotal evidence of lobbying at the initial stages of the Eurosur feasibility study and the Pilot. Industry actors showed their keenness to win the contract via lobbying and the competitive behaviour regarding the lawsuit following the award of the Pilot contract to GMV in 2010. However, evidence in the procurement outcomes did not support claims of industrial and technical imperatives driving the choice of contractor and form of ECN solution.[1103] Once the Contract had been awarded to GMV, the company had input into

1103. HAYES, B. & VERMEULEN, M. 2012. *Borderline: The EU's New Border Surveillance Initiatives: Assessing the Costs and Fundamental Rights Implications of EUROSUR and the" Smart Borders" Proposals: a Study by the Heinrich Böll Foundation*, Heinrich-Böll-Stiftung.

software infrastructure but did not control specification as demonstrated by the format of the Framework contract.

The research finds that the ECN contract was not procured with reference to member state sponsorship, industrial lobbying, or input from industrial figures. But rather with reference to Commission role expansion objectives and member state 'community of values' cultural objectives for coordinated border surveillance in transnational border zones.

Section 3: Procurement of ASS (2015)

This section considers the procurement of 'Aerial Surveillance Services' (ASS) by Frontex in 2014 and 2015. This €10 million Framework Contract (the ASS Contract) was awarded by Frontex to 6 contractors[1104] for ASS to monitor 'objects of interest'[1105] such as illegal movement across EU land and maritime borders. A pilot programme was run from March to May 2014. In April 2015 the Contract Notice was posted on the EU Tendering website (TED),[1106] and in July 2015 the Contract was awarded.[1107] Analysis of the ASS Contract is significant as Frontex continues to expand its remit and arguably becomes the Commission's first agency to be able to procure security capability under

1104. EASP Air (Netherlands); CAE Aviation s.a.r.l. (Luxembourg); Diamond-Executive Aviation Ltd (UK); Défense Conseil International (France); Vigilance BV (Netherlands); Indra Sistemas SA (Spain) ; SIA 'Meža īpašnieku konsultatīvais centrs' (Latvia)

1105. FRONTEX 2015a. Framework Contract for Aerial Surveillance Services Assets and Expert Support; Tender Specifications – Annex 1. Warsaw. p.6

1106. FRONTEX 2015b. Framework Contract Notice for Aerial Surveillance Services Assets and Expert Support. Warsaw, Poland: Frontex.

1107. FRONTEX 2015d. Poland-Warsaw: Framework contract for aerial surveillance services assets and expert support. Warsaw.

its own authorisation, using multilateral funding.[1108] The research considers the pressures upon Frontex to perform its mandate to monitor EU borders, and therefore to procure aerial surveillance capability. It concludes that scrutiny of the organisation gave weight to cultural 'community of values' drivers to save migrants and procure surveillance capability.

As in previous sections, macro drivers for the procurement included a demand for a solution to the crisis levels of illegal migration, and also cultural, humanitarian motives to save migrants' lives. These motives originated from member states and the Commission, via its role as security provider as well as representing the 'community of values'.[1109] The research found that the urgency of the situation amplified the cultural drivers and gave the procurement momentum. It also concluded that an additional influence on the procurement was the literature criticising member state and EU border surveillance measures. This scrutiny (additional to bureaucratic accountability) gave Frontex significant incentives for an efficient and successful procurement.

1108. Personal Interview with Brooks Tigner; EUROPEAN COMMISSION 2015b. A European Border and Coast Guard to protect Europe's External Borders. Strasbourg.; EUROPEAN PARLIAMENT & EUROPEAN COUNCIL 2016. REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the European Border and Coast Guard and amending Regulation (EU) 2016/399 of the European Parliament and of the Council and repealing Regulation (EC) No 863/2007 of the European Parliament and of the Council, Council Regulation (EC) No 2007/2004 and Council Decision 2005/267/EC. Brussels.; EUROPEAN COMMISSION 2017. REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL AND THE COUNCIL
on the operationalisation of the European Border and Coast Guard. Brussels.

1109. PERKOWSKI, N. 2012. A normative assessment of the aims and practices of the European border management agency Frontex. Oxford: Refugees Studies Centre.

Drivers for the procurement in the organisational context included pressure from the Commission to spend Frontex's expanded budgets, and organisational, strategic objectives for a low risk, cost efficient surveillance solution. This was achieved via the format of the Framework Contract and the choice of contractors. Further, bureaucratic politics were avoided by limiting member state and industrial involvement in the decision-making process. The research finds that although member state actors and industry actors were present during and after the procurement process, Frontex was the primary actor and its interests were the dominant drivers for the procurement outcomes. Thus Agency objectives superseded member state interests in the choice of surveillance solution, where Frontex chose to directly procure the ASS rather than award member state grants. Agency objectives also superseded industry interests as demonstrated by the competitive nature of the Framework Contract, which proved very advantageous for Frontex. Here, the Agency was able to capitalise strategically on industry perceptions of symbolic prestige associated with an EU agency. The section first examines the macro environment of Commission policy concerning Frontex aerial surveillance requirements, and then the micro, bureaucratic context of the procurement process decisions.

Security Context

In the months preceding the ASS procurement in 2014 and 2015, member state and Commission discourse demonstrated both calculus and cultural drivers for aerial surveillance solutions. The escalation of the migrant crisis over the summer months meant that increased demand for surveillance assets coincided with shortages in personnel due to summer breaks.[1110] Aerial surveillance to monitor illegal movement over borders was routinely performed by member states and coordinated by Frontex

1110. Personal Interview with 003

Joint Operations Unit, in operations such as Operation Triton.[1111] These surveillance measures were accepted by member states and the Commission as an aid to member state border agencies so that they could apprehend migrants and mitigate perceived threats of cross border crime and terrorism as well as preserve lives and rights of vulnerable groups of people. However, Frontex had not directly contracted aerial surveillance capability, until the ASS Contract.

As well as calculus drivers, cultural drivers were also present. The influential 'Left to Die Boat' report[1112] had investigated the events surrounding the deaths of 72 migrants fleeing from Tripoli in March 2011. While Frontex was largely exonerated in the report, the EU Parliamentary Assembly response reflects the societal horror at the tragedy, in a maritime area that was being monitoring by many agencies and ships,[1113] including the military maritime surveillance network MARSUR.[1114] The mandate of Frontex was referenced in this published response to the incident, and the report probably had an influence on Agency policy and procurement. Here, Frontex felt societal pressure to maintain a liberal, humanitarian stance towards the migrants as representative of the EU's 'community of values',[1115] despite increased surveillance actually encouraging the migration figures, which was a security concern of the member states. This cultural driver was amplified in 2015 due to the migrant crisis with urgent calls for solutions

1111. FRONTEX 2014b. FRONTEX LAUNCHES JOINT OPERATION TRITON. Warsaw.

1112. HELLER, C., PEZZANI, L. & STUDIO, S. 2011. Left to Die Boat. *In:* FORENSIC ARCHITECTURE (ed.). London: Centre for Research Architecture, Goldsmiths College.

1113. PARLIAMENTARY ASSEMBLY 2013. The “left-to-die boat”: actions and reactions. *In:* COUNCIL OF EUROPE (ed.). Brussels: Council of Europe,.

1114. https://www.eda.europa.eu/what-we-do/activities/activities-search/maritime-surveillance-(marsur) Accessed April 2018

1115. PERKOWSKI, N. 2012. A normative assessment of the aims and practices of the European border management agency Frontex. Oxford: Refugees Studies Centre.

from both member states and the press.[1116] It was no coincidence that the Frontex ASS Contract notice[1117] was posted just before the deadliest incidents in April 2015 when over 1,500 people died in 2 shipwrecks in the Mediterranean between Libya and Italy.[1118]

Thus the macro context for Frontex's procurement of ASS in 2015 generated two major drivers; first, the strategic mission of meeting member state concerns over the threat of illegal movements across EU borders; and second, the cultural, humanitarian driver to save migrant lives. The cultural concern for migrants stimulated much criticism from academics, politicians and journalists of the EU and Frontex border surveillance solutions. This would prove influential in the procurement processes and decisions described below. The research also considered evidence of drivers for procurement in the micro, organisational context of Frontex's bureaucratic processes. It found that the procurement processes were driven by Frontex's strategic objectives of efficiency, flexibility and low risk thereby ensuring institutional reputation and survival. The research finds that these objectives supersede member state interests for grant giving and that the Agency avoided the bureaucratic politics of involving member states in the decision-making process. Further, the study demonstrates that, despite accusations of

1116. DEEB, S. E. 2015. More than 700 migrants feared dead in largest loss of life in the Mediterranean since April 2015. Associated Press: National Post.; BONOMOLO, A. & KIRCHGAESSNER, S. 2015. UN says 800 migrants dead in boat disaster as Italy launches rescue of two more vessels. *The Guardian*.; HELLER, C. & PEZZANI, L. 2015. Death by Rescue. Forensic Oceanography.

1117. FRONTEX 2015b. Framework Contract Notice for Aerial Surveillance Services Assets and Expert Support. Warsaw, Poland: Frontex.

1118. HELLER, C. & PEZZANI, L. 2015. Death by Rescue. Forensic Oceanography.

industrial imperatives by commentators,[1119] industry actor interests were not prioritised in the procurement decisions.

Procurement of ASS

Four decision-making stages are considered for evidence of drivers in Frontex's procurement process. First, the formal decision for procurement; second, the ASS specification; third, the format of the tendering process and contract; and fourth, the contractors chosen. The procurement decision was driven by a need to meet member state strategic and cultural objectives, but the form and the nature of the ASS Contract was affected by Frontex's desire for a successful and efficient outcome. Successful procurement would ensure the reputation and survival of the Agency in the pressurised environment described above.

The policy decision for Frontex's procurement of aerial surveillance was in large part driven by the urgent macro context of the migrant crisis, but two bureaucratic aspects also influenced the formal decision for procurement. First, the Commission was encouraging Frontex to spend its surplus budgets and second, Frontex did not go through the normal procurement and budgetary processes that ordinarily involved greater member state and Commission input. Thus the decision-making took on a different character and was Agency focussed.

1119. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.;JONES, C. 2014. Border guards, planes, "thermal vision vans" and heartbeat detectors – who is equipping Frontex? *Statewatch*.

To consider the first aspect, in response to the EU and member state concerns expressed above, the budget of Frontex was increased from €97m in 2014, to €142m in 2015, and €254m in 2016.[1120] Here there was a concern that, since the expansion of resources, Frontex had incurred carryovers in its budget from year to year.[1121] Therefore there was an implication that Frontex was not using these resources to provide additional measures to monitor the EU's borders. An observer also suggested that Frontex management were looking for projects in 2014 and 2015 to spend these surplus funds, and that the procurement of aerial surveillance capability was, in part, a result of this pressure.[1122] The Commission was concerned that Frontex's increasing budget was spent each year to fulfil its obligations to monitor EU borders. The Commission may have encouraged this to justify the additional funds from member states but also to ensure that Frontex, under the Commission's auspices, retained the mandate for securing the EU borders and did not cede this responsibility to competing security agencies such as the EDA and its MARSUR operation.[1123]

The pressure from the Commission provided a direct, bureaucratic, calculus motive for Frontex to take a decision to procure ASS capability. Notably, the research does not

1120. https://frontex.europa.eu/assets/Key_Documents/Budget/Budget_2016.pdf Accessed April 2018

1121. EUROPEAN COURT OF AUDITORS 2014b. Report on the annual accounts of the European Agency for the Management of Operational Cooperation at the External Borders of the Member States for the financial year 2013. Luxembourg.; EUROPEAN COURT OF AUDITORS 2015. Report on the annual accounts of the European Agency for the Management of Operational Cooperation at the External Borders of the Member States for the financial year 2014 together with the Agency's reply. Luxembourg: ECA.europa.eu.

1122. Interview with Gregorio Ameyugo

1123. FIOTT, D. 2015. The European Commission and the European Defence Agency: A Case of Rivalry? *JCMS: Journal of Common Market Studies,* 53**,** 542-557.; CARRERA, S. & DEN HERTOG, L. 2015. Whose Mare? Rule of law challenges in the field of European border surveillance in the Mediterranean. CEPS Liberty and Security in Europe No. 79/January 2015.

find evidence of Frontex looking to expand its role via the procurement. If anything it had to be cajoled by the Commission to spend its budget and perform additional tasks. Reluctance on Frontex's part may be attributed to the fact that the Agency had been asked to reduce its headcount even in the face of increased resources.[1124] The 2013 EU budgets had called for reduction in staff numbers in decentralised agencies, and therefore Frontex were under pressure to do more with a higher budget but with the same headcount.[1125] The Head of Finance and Procurement Unit commented that increased financial resources had not translated into more human resources, rather it ensured a stable number rather than the planned reductions.[1126] The evidence therefore indicates that there was influence for expansion in responsibilities from the Commission rather than Frontex, and that Frontex solved this via the leasing of aerial surveillance capability. As referred to in Chapter Three, there are existing articles on the Commission's aspirations for an increased security role.[1127] This procurement is a small manifestation of an EU agency performing a security role in its own right, rather than merely coordination of member state security activity.

Regarding the second aspect, that Frontex usual budgeting and procurement routes were not followed, the study found that this decision reduced member state input into the decision-making process. The 2015 migrant crisis escalated too quickly for member

1124. Personal Interview with Darek Saunders

1125. EU COMMISSION 2013a. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL: Programming of human and financial resources for decentralised agencies 2014-2020. Brussels. p.16; Personal Interview with 003

1126. Personal Interview with 003

1127. KAUNERT, C. 2007. "Without the Power of Purse or Sword": The European Arrest Warrant and the Role of the Commission. *Journal of European Integration,* 29**,** 387-404.; KAUNERT, C. 2005. The Area of Freedom, Security and Justice: The Construction of a 'European Public Order'. *European Security,* 14**,** 459-483.

states to provide either additional national contributions to Frontex operations, or provide member state direction via the usual bureaucratic routes of the PoW. In this respect Frontex had no time to formally prepare and budget for the additional, supplementary surveillance capability needed. There were no specific policy papers relating to the acquisition of ASS, as there were for the creation of the ECN. Frontex management, with reference to the Frontex regulation for the procurement authorisation, therefore took the decision. Here, the Director would have sent the letter to the RDU and Pooled Resources to initiate the specification process.[1128]

Agency officials noted that, other than policy documents such as the Frontex Regulation and the PoW, member state representatives have little or no input into decision-making in procurement processes.[1129] If these budgetary and PoW stages are not fulfilled, then the European Commission's Court of Auditors largely confines member state input to retrospective analysis. The lack of member state input also meant that any bureaucratic politics were avoided. This aided the swift procurement process, although there is no evidence that the Agency specifically sought to avoid member state involvement.

ASS specification

Frontex had two alternatives for providing aerial surveillance capability. First, it could directly procure the capability, and second it could award a grant to a member state to provide the assets required for border surveillance.[1130] There were multiple incentives

1128. Personal Interview with Ivan Inchovsky and Gregorio Ameyugo

1129. Personal Interview with 003

1130. FRONTEX 2014a. FINANCIAL REGULATION
European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union. Warsaw.

for Frontex to contract directly for ASS in this context. First, in 2015 member states were unable to provide the additional surveillance assets required to address the problem. This was due to national requirements and personnel and staffing issues over the summer period when the migrant crisis was at its height.[1131] Second, direct leasing of the capability was a more timely solution compared to awarding grants to member states to acquire additional assets. Assets that were bought or leased by member states via Frontex grants entailed long lead times and high costs due to the bureaucratic politics and complexities.[1132] Frontex had attempted to acquire a surveillance plane in 2013 but had been unsuccessful with few responses to the tender.[1133]

Despite Frontex's lack of experience and the potential inefficiencies associated with this inexperience, the Framework Contract represented the better solution for Frontex from a strategic and organisational perspective as it worked directly with contractors. Given the direct nature of the procurement decision, Frontex had to justify its decision for procurement retrospectively to the European Court of Auditors. Here, member state representatives were able to question Frontex about the procurement.[1134] Formal records of this interaction are difficult to obtain, and the European Court of Auditors 2015 Report makes no mention of this case. However in 2016, a Special Report by the European Court of Auditors analysed, amongst other case studies, Frontex' costs of contracting of ASS versus the granting of financial aid to support similar member state

1131. Personal Interview with 003

1132. GALEA, L. & MCGUINESS, M. 2016. Agencies' use of grants: not always appropriate or demonstrably effective. Luxembourg: European Court of Auditors.

1133. STATEWATCH. 2013. Frontex cancels surveillance plane contract due to lack of interest from companies. Available: http://www.statewatch.org/news/2013/oct/frontex-plane1.htm [Accessed 2 January 2015].

1134. Personal Interview with 003

efforts.[1135] The report supported the decision for procurement of the ASS and noted that the cost of services reduced significantly where this took place. The reasons for these efficiencies are explored below as part of the procurement process analysis.

Frontex management made the decision for ASS procurement in response to European perceptions of security threats and cultural expectations related to the migrant crisis, bureaucratic pressures from the EU to spend surplus funds, and a calculated decision that direct procurement was more efficient than awarding a member state grant. Notably the decision for procurement met with the concerns for fulfilment of the member state security concerns, but it did not reflect their interests concerning equipment and capability. Member states would prefer Frontex to award grants so that they get the financial benefit and control over the missions.[1136] Here Frontex sidestepped this in the interests of more efficient procurement and an enhanced role. Thus the decision for procurement broadly served member state macro security interests (i.e. monitoring the EU borders) but not their micro interests (for greater access to direct funding), where they would prefer greater control over the surveillance process and to receive the award of a grant to purchase their own surveillance services.[1137] The decision for procurement was driven by Frontex's organisational concerns and objectives to respond to macro pressures, to ensure its survival as an organisation, and to avoid further critical commentary. Next the section considers the ASS specification.

1135. GALEA, L. & MCGUINESS, M. 2016. Agencies' use of grants: not always appropriate or demonstrably effective. Luxembourg: European Court of Auditors. p.22

1136. Personal Interview with Peter Bondar

1137. Ibid

The decision-making at the specification stage also provides evidence of drivers of the procurement process. As one expert commented, 'Procurement is an Art!'[1138] and the subjective judgement behind the specification reveals the concerns of those involved. It therefore has significance in reflecting the Agency's objectives and therefore drivers for the procurement. For the 2015 Contract, the Pooled Resources unit was joined by RDU to write the formal Tender Documents, including the specification. The alternative solutions for direct provision of ASS by Frontex were first, to buy and operate an aircraft (either manned or unmanned) or second, to lease an aircraft (either manned or unmanned). Frontex had requested bids to purchase a manned aircraft in 2013, but due to lack of response this had been dropped.[1139] Frontex has also been referred to in critical commentary about EU ambitions for unmanned aircraft.[1140] These two aspects, along with the timing constraints (related to the migrant crisis), affected their choice for the flexible, leased, manned aircraft. The detailed specification for the ASS Contract was then informed by internal informal and formal discussions as to the exact format of the aerial surveillance capability,[1141] and also by external input from the Pilot project and an Industry Open Day, both held in 2014. The Pilot project was run by the Pooled Resources and Joint Operations Unit[1142] and entailed a feedback report from the

1138. Personal Interview with Gregorio Ameyugo

1139. STATEWATCH. 2013. Frontex cancels surveillance plane contract due to lack of interest from companies. Available: http://www.statewatch.org/news/2013/oct/frontex-plane1.htm [Accessed 2 January 2015].; http://database.statewatch.org/article.asp?aid=32302 Accessed March 2017

1140. HAYES, B., JONES, C. & TOPFER, E. 2014. Eurodrones Inc. Amsterdam: Statewatch.

1141. Personal Interview with 003

1142. FRONTEX 2014d. Pilot project on purchase of Aerial Surveillance Service for Frontex Joint Operations. Warsaw.; Personal Interview with Ivan Inchovsky

contractor, Diamond Executive Aviation.[1143] The Agency also held an Industry Open Day for various private sector providers to present their aerial surveillance capability.

The exact performance specification of the Frontex aerial surveillance requirements was difficult to find, as they were refined for each RfS. The Tender Specification for the Aerial Surveillance indicates the scope and payload expected in the operations.[1144] This details that payload of the aircraft should consist of sensors 'necessary to the purpose of the flight: I.e. Electro-optical, Infrared, Radar, GPS and AIS Receiver'.[1145] However, the budgets involved would indicate that the capability of the sensors and the related datalinks were necessarily limited to a civil security specification that was not at the same sophistication of a military asset.[1146]

As mentioned in the preceding section, industrial lobbying traditionally happens directly with the Commission or via member state sponsorship.[1147] Within Frontex there is anecdotal evidence of direct lobbying[1148] by industry, but where recent 'freedom of information' (FOI) requests have been granted regarding meetings with industry,[1149]

1143. DEA. 2014. *DEA Completes Frontex Pilot Project* [Online]. UK. Available: http://www.dea.aero/about-us/latest-news/100-dea-completes-frontex-pilot-project [Accessed March 13 2017 2017].

1144. FRONTEX 2015a. Framework Contract for Aerial Surveillance Services Assets and Expert Support; Tender Specifications – Annex 1. Warsaw. p.6

1145. Ibid. p.5

1146. Personal Interview with Peter Bondar

1147. ANDERSSON, R. 2014. *Illegality, Inc. Clandestine Migration and the Business of Bordering Europe,* Oakland, University of California Press.

1148. Personal Interview with 005

1149. https://www.asktheeu.org/en/request/contacts_with_the_defence_and_se#incoming-8333 Accessed March 2017

observers note that there has been limited corporate access to Frontex.[1150] This study also finds limited input from industry over the specification of the aerial surveillance capability. There is also no evidence of member state sponsored industry meetings at Frontex. Frontex officials confirm this and assert that national sponsorship, often seen in defence contracts, is 'not imaginable' in the Frontex bureaucracy where the organisation is run along departmental lines rather than structured with member state allegiance.[1151] Private sector actors also testify to the fact that Frontex does not demonstrate member state allegiance given that they all come from different parts of the EU.[1152]

In the ASS procurement process, Frontex specified a 'fee for Service' Framework contract, effectively leasing a manned surveillance capability as required. The specification focussed on Frontex's concerns, concentrating on aspects such as the sophistication of the equipment leased,[1153] with the main objective of the procurement to achieve as much sophistication as possible with the least cost.[1154] This Contract reflected Frontex's concern for a low cost, low risk and flexible service. Here, contractors bid competitively to provide a surveillance 'Service'[1155] each time there is an

1150. AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute. p.17

1151. Personal Interview with 003

1152. Personal Interview with Peter Bondar

1153. FRONTEX 2015a. Framework Contract for Aerial Surveillance Services Assets and Expert Support; Tender Specifications – Annex 1. Warsaw. p.6 & p.13

1154. Interview with Peter Bondar

1155. 'Service': Is the subject of a specific contract. A service is composed of a number of flights called mission, each of these missions is carried out in a specific Areas of Interest, defined within the Service Deployment Area.'; FRONTEX 2015a. Framework Contract for Aerial Surveillance Services Assets and Expert Support; Tender Specifications – Annex 1. Warsaw. p.5

RfS from Frontex.[1156] The decision for this form of ASS was for both pragmatic and political reasons. First, the urgency of the crisis required a rapid response, and this solution could be quickly implemented. Second, Frontex had allocated relatively small budgets for ASS and the leasing was relatively inexpensive. Third, this was the first time that they had made this type of procurement so there was a learning curve. This provided a small-scale solution where each 'service' could be reviewed.

Finally and fourth, Frontex was cautious about their reputation due to the level of scrutiny, with their reputation at stake if the procurement went wrong, and this small-scale approach allowed for low level mistakes. As mentioned above, Frontex is politically visible and accountable to other vociferous organisations.[1157] This meant that if the procurement was unsuccessful they faced public censure from the European Court of Auditors, member states (who would be unhappy with the fact that Frontex was providing the role rather than giving grants to member states to provide the role) and other academics and journalists tracking the EU's use of private sector border

1156. Ibid. p.6

1157. Such as the Commission, member states and academic snd journalist observers: NIELSEN, N. 2014. EU border surveillance system not helping to save lives. *euobserver*.; MUIŽNIEKS, N. 2014. Europe, Wake Up! *New Europe*.; HAYES, B. & VERMEULEN, M. 2012. *Borderline: The EU's New Border Surveillance Initiatives: Assessing the Costs and Fundamental Rights Implications of EUROSUR and the" Smart Borders" Proposals: a Study by the Heinrich Böll Foundation*, Heinrich-Böll-Stiftung.; HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; HAYES, B., JONES, C. & TOPFER, E. 2014. Eurodrones Inc. Amsterdam: Statewatch.; AKKERMAN, M. 2013. Selling Border Militarization as a Humanitarian Effort. *Stop Wapenhandel*.; AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.; BIGO, D. & JEANDESBOZ, J. 2010. The EU and the European Security Industry, Questioning the 'Public-Private Dialogue'. *CEPS, IN:EX Policy Brief,* No.5.

surveillance measures.[1158] As a former member of the European Court of Auditors commented:

> In the Frontex rules and policies, they are bound to ensure full respect of fundamental rights, fundamental human rights. In one instance..... we had faulted Greece in this context, because we found, that in the implementation of the budget of the Frontex budget, for that particular project. The way that the immigrants were handled was breaching fundamental human rights, and this was picked up and reported upon, and remarked upon.[1159]

First, to address the relatively low value of the contract. Although one EU official observed that Frontex, as a bureaucracy, had relatively high budgets compared to other security bureaucracies such as NATO and the EDA,[1160] the €10 million budget allocated for the contract was not large for the procurement of aerial surveillance assets. Some discussion had taken place internally as to how much should be allocated. As the head of the Procurement team observed, it is difficult to quantify 'sufficient' surveillance at any given context to meet the perceived threat or concern regarding illegal migration or migrant safety.[1161] Second, the small amount allocated for the aerial surveillance may have reflected caution regarding this first time procurement by the Agency. It meant that observers commented that the specification details and tendering evaluation initially

1158. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; AKKERMAN, M. 2016b. Border Wars, The Arms Dealers Profiting from Europe's Refugee Tragedy. Transnational Institute.

1159. Personal Interview with Louis Galea; EUROPEAN COURT OF AUDITORS 2014a. The External Borders Fund has fostered financial solidarity but requires better measurement of results and needs to provide further EU added value. Luxembourg. p.33

1160. Personal Interview with Gregorio Ameyugo

1161. Personal Interview with 003

seemed inexperienced.[1162] Frontex staff also confirmed this.[1163] Further, if one considers other contracts procured by Frontex,[1164] this was a relatively large procurement for the Agency for an external service. Evidence for the concern for flexibility and a learning process was found in the Tender Dossier that contains the general specification required, but additionally each 'Service' has a specific 'Description of Assignment' or specification related to the Service. This allowed Frontex to refine further the required specification after feedback from other 'Services'.[1165]

Tendering and Contract Outcomes

The research also considered the tendering process and ASS Contract outcomes. As noted, many have alleged that there are industrial influences on the policy-making processes of Agencies such as Frontex.[1166] However, there is little evidence to suggest this in the outcomes relating to the ASS Contract. Two aspects support this view and suggest that private sector interests were not prioritised, and therefore that industry's influence was limited. First, the size of the contract and second, the nature of the 'Framework' Contract. The small size of the contract means that it precluded some of the larger security and defence actors from tendering, as they were unable to compete and provide services for this contract size given their overheads and the profit margins

1162. Personal Interview with Peter Bondar

1163. Personal Interview with Gregorio Ameyugo and with Peter Bondar

1164. FRONTEX 2016. Annual list of aggregate values of specific contracts concluded by Frontex in 2015 under framework contracts. Warsaw.

1165. FRONTEX 2015a. Framework Contract for Aerial Surveillance Services Assets and Expert Support; Tender Specifications – Annex 1. Warsaw.

1166. HAYES, B. 2009. NeoConOpticon, the EU Security Industrial Complex. Statewatch.; HAYES, B. & VERMEULEN, M. 2012. *Borderline: The EU's New Border Surveillance Initiatives: Assessing the Costs and Fundamental Rights Implications of EUROSUR and the" Smart Borders" Proposals: a Study by the Heinrich Böll Foundation*, Heinrich-Böll-Stiftung.;

that they require.[1167] Frontex showed no concern to include these actors and indeed observers note that the inclusion of larger contractors was not a concern to the Agency or Commission.[1168] Therefore this contract attracted smaller players, with lower cost bases, who were able to work with slim profit margins.

Second, the format of the Framework Contract conferred power to Frontex. This was a major reason for the cost efficiencies achieved by the Agency, and industrial partners of Frontex support this observation.[1169] These contractors testify to the efficiency of the Framework Contracts, where the multiple contractors have to competitively bid for each RfS with very short lead times, rather than being awarded a set contract for a period of time. Here competition is fierce, and the research gathered anecdotal evidence of small-scale industrial espionage, where rival companies report each other to Frontex regarding any lack of fulfilment of the Service specification.[1170] An important aspect of the efficiency of the process was that these smaller companies were both able and *willing* to operate on slim profit margins. As in other contracts examined in this research, evidence was found of Industry cutting costs to win the Contract in part to claim the symbolic prestige of working with Frontex. This would then be used for marketing purposes to gain future contracts. Smaller companies do this perhaps to a greater extent than larger companies, who do not need validation for marketing purposes in the same way.

1167. Personal Interview with Peter Bondar

1168. Personal Interview with 006

1169. Personal Interview with Peter Bondar

1170. Ibid

Thus the research finds that the contracts were awarded to companies that were able and willing to meet the exacting cost levels and specifications required by Frontex, successfully achieving efficiencies that are not often found in collaborative acquisition.[1171] This was achieved in part due to the way that Frontex specified the contract, in part the way that the contract was drawn up as a Framework contract, and in part because Frontex was able to capitalise on the prestige associated with its status as an EU Agency.

A final aspect of the procurement was the decision-making process for the specific private contractors chosen first for the Framework Contract, and subsequently those chosen pursuant to calls for 'Service'. Once the ASS specification was decided, the Pooled Resources Unit sent the formal procurement request to the Procurement team. The Tender Dossier was then produced in a similar manner to the ECN contract analysed above. It included Frontex's requirements for the Technical Proposals to be produced by the Tenderers, and also indicated the Technical Evaluation criteria used by Frontex.[1172] The Dossier also included information regarding the Technical Evaluation of the specific calls for 'Service'.[1173]

Having published the Tender Dossier, Frontex Pooled Resources Unit and RDU Team held an open day for the tenderers to ask general questions about the ASS Contract.[1174]

1171. DEVORE, M. R. 2011. The Arms Collaboration Dilemma: Between Principal-Agent Dynamics and Collective Action Problems. *Security Studies,* 20**,** 624-662.

1172. FRONTEX 2015a. Framework Contract for Aerial Surveillance Services Assets and Expert Support; Tender Specifications – Annex 1. Warsaw. p.20

1173. Ibid. p.21

1174. Personal Interview with Ivan Inchovsky

In this manner, all the potential contractors were aware of questions from rival companies and the answers provided by Frontex. Even those questions asked at a later date via email were shared with all the Tenderers. The procurement process then entailed the Frontex evaluation team[1175] obtaining financial references of potential contractors, and evaluating the proposed ASS provision via strict criteria that were also shared with the companies. These EU-wide bureaucratic practices allow for a transparent and fair choice of contractor by the EC.[1176]

The initial tender stage of the Procurement described above elicited thirteen responses. These were narrowed down to six successful tenderers who entered the Framework Contract. As with the ECN Contract, given the transparency of the process, the publication of the relevant documents, and the evaluation methods, it is difficult to see how any preference, outside of the strategic concerns of the procurement, would be able to influence the EC at this point. Especially as contractors are incredibly competitive and the decisions often need to be defended as there are frequent appeals. There was some anecdotal evidence of a preference for a given contractor being chosen, with a competing company being dismissed on a technicality. But even here the rationale for choosing the particular contractor was one based on merit and a working relationship, rather than a preference driven by member state sponsorship or as the result of private sector lobbying activities.[1177] Thus the decision for contractor reflects Frontex's strategic bureaucratic practices whose concerns for an efficient outcome are largely met.

1175. Comprising the Pooled Resources, RDU and the Procurement team

1176. Evaluation Committee

1177. Personal Interview with Procurement Expert

A final, general aspect to reiterate concerning Frontex decision-making for the ASS Contract was the relative lack of bureaucratic politics. There is little evidence of inter-departmental or member state representative 'pulling and hauling' within the Agency in decisions relating to specification or choice of contractor. Within Frontex departments, the homogenous nature and culture of the bureaucratic officials experienced during interviews indicates that most Frontex officials held a common interpretation of pressures upon the Agency. Evidence of some interdepartmental 'pulling and hauling' was found at the specification stage where the RDU was brought in after the Pooled Resources Unit had specified the initial pilot contract with mixed results.[1178] A general conclusion is of the positive effects of Frontex's organisational culture on the procurement process.

This section considered drivers for Frontex's multilateral procurement of ASS. In the macro context, the study found that original member state political support for a Frontex aerial surveillance solution was to combat illegal migration and transnational crime, as per the Frontex regulation. However, there were also important, value based drivers for the procurement concerned with saving migrant lives and protecting their fundamental rights. This was reflected in the Frontex regulation amendments and the discourse surrounding Frontex's role in the period preceding the procurement.[1179]

In the micro context, bureaucratic pressure from the Commission for Frontex to spend its budgets and to realise its expanded responsibilities was another driver behind the

1178. Personal Interview with Gregorio Ameyugo; Personal Interview with Peter Bondar

1179. FORUM, F. C. 2014. Second Annual Report, Frontex Consultative Forum on Fundamental Rights.; CEDERBRATT, M. M. 2013. Frontex: human rights responsibilities. *In:* COMMITTEE ON MIGRATION REFUGEES AND DISPLACED PERSONS (ed.). Brussels: EU Parliamentary Assembly.

decision for procurement. Within the procurement process, bureaucratic drivers were found to be Frontex-oriented, calculus motives. Here Agency objectives were met and superseded member state and industry interests. Despite reports claiming that industry influenced Frontex policy, the outcomes of this Contract suggest that Frontex prioritised its own interests above Industry considerations. Thus the calculus driver for the procurement in the micro environment would seem to be Agency self interest and survival.

Overall, a major influence on the procurement was the time pressure for providing ASS. This magnified two drivers, the member state humanitarian concerns, and Frontex's autonomy and universal culture for procurement. In the macro context it magnified the cultural drivers, with the prevailing sense of urgency to save lives. The study found that the calculus strategy was not a sufficient driver for the procurement in its macro context, as seen in the failed aerial surveillance capability procurement in 2013, and the critical literature also reflects this. This meant that the magnified, cultural, driver was necessary for the procurement and for Frontex to gain momentum to justify the procurement decision via their regulation. In the micro context, the study concludes that efficiencies were achieved through the strategic use of the Framework Contract, but also through the cultural coherence found in the procurement processes and the lack of bureaucratic politics. The time pressures allowed for avoidance of bureaucratic procedure and set precedent for Frontex to rely on its regulation for action.

EU Commission / Frontex Conclusions

This chapter has presented evidence of the drivers behind Frontex's procurement processes focussing on two contracts: from the Commission's policy formation, to the ECN procurement and the ASS procurement. This concluding section applies the theoretical framework to the analysis and considers the balance of the drivers for the collaborative procurement. It follows a similar format to those conclusions described in the NATO AGS case study in Chapter Four. The first section provides analysis to ascertain the balance of calculus and cultural drivers at different stages in the procurement decision-making. It uses Bennett's tests of causation.[1180] The second section applies the broad theoretical framework of strategic choice, sociological institutionalism and organisation theory to the findings.

Findings and Analysis regarding Drivers for Procurement

The three stages of this Frontex case study: the Policy, the ECN Contract and the ASS Contract, are linked, and common drivers may be discerned throughout the decision-making processes. As in the NATO case study in Chapter Four, the research refers the data gathered from Bennett's tests[1181] (for necessary and sufficient causation) to adjudicate between the different explanations for the acquisition for Frontex's surveillance capability. Again, there is a combination of explanations for political will and organisation drivers for the policy and procurement for Frontex's surveillance capability.

1180. Bennett's Tests for causation were outlined in Chapter 1 Methodology Section. P.61 Tests for causation are categorised as 'Doubly Decisive'; 'Smoking Gun'; passing the 'Hoop'; and 'Straw in the Wind'. BENNETT, A. 2010. Process tracing and causal inference. *In:* BRADY, H. & COLLIER, D. (eds.) *Rethinking Social Inquiry.* Rowman and Littlefield.

1181. Ibid. See p.61 in Chapter One.

Strategic Choice (calculus)

Strategic Rationale Driver

The strategic rationale for border surveillance was apparent in the literature and policy statements relating to the Eurosur policy. The policy would not have been instigated without this driver. However member state reticence over Frontex's role meant that additional drivers were needed for agreement to the policy. Data indicated that the surveillance function would not solve the migrant crisis, but addressed cultural concern for monitoring migrant behaviour and enables further safety and security measures to be taken. Cultural aspects of surveillance are addressed below. **The strategic rationale driver for the border surveillance mission is deemed necessary but not sufficient as an explanation for the Eurosur and ASS procurement, and passes the hoop test.**

Member states were keen to avoid obligations to finance Eurosur, so the fact that the Commission provided funding solutions enabled agreement to the policy and ECN and ASS implementation. Further, the low level of costs achieved by Frontex via the 'framework contract' also facilitated the procurement. **Thus the strategic rationale driver for cost efficiency can been seen as a 'smoking gun', sufficient for causation, but it is difficult to prove that the low cost of the solution drove the procurement.**

Industrial Imperative Driver

Industrial imperative drivers may have been present at the policy stage of the procurement, as there was evidence of lobbying activity. However, Frontex's concern for strict freedom from this influence during the procurement decision-making was evident in the data. Staff were aware that the organisation was being scrutinised and

there had also been legal challenges to former procurement decisions. This strengthened the concern for open and transparent accountability regarding the choice of contractor. **Thus there is little evidence for this driver in the procurement outcomes, therefore it has been discounted and categorised as 'straw in the wind' according to Bennett's definitions.**

Technical Imperative Driver

Similarly, allegations of technical imperatives in the literature were not discernible in the procurement outcomes. Bureaucratic politics and the urgency of the situation prevented technical considerations being given priority at the specification stages. **The technical imperative driver has therefore also been discounted and categorised as 'straw in the wind'.**

Organisation Theory

Organisation Role Expansion Driver

Data regarding the Commission's role expansion driver was in evidence at all stages of the process. Role expansion objectives were found in the Commission's policy entrepreneurship and rivalry with other organisations (as indicated in the existing literature), and by the fact that the surveillance capability represented a new role for the organisation. The Commission used cultural arguments for its calculus objectives, thus this driver reflects a combination of incentives. **Role expansion would seem to pass Bennett's hoop test (necessary but not sufficient, as the Commission needed the consent of member states at the policy stage). However, without the existence and drive of the Commission the procurement would clearly not have taken place.**

Sociological Institutionalism (Culture)

Symbolic Drivers

'Community of Values': The Western 'community of values' cultural driver was also present affecting behaviour and driving the process throughout the case study. Here data showed that concern for migrant safety and fundamental rights allowed the Frontex and Eurosur Regulations to be passed; was used by the Commission in its justifications for the capability and mission; and used by Frontex bureaucracy when referring to the surveillance functionality. **Thus the research concludes that this explanation passes the hoop test, as necessary but not sufficient to drive the procurement.**

Civil military: Civil security aspects of the capability also enabled the Commission to claim that the functionality fitted the remit of its Schengen responsibilities rather than the military remit of the EDA or even NATO. **Thus the civil military strategic cultural explanation passes the smoking gun test as being sufficient but not necessary as a driver for the Commission to drive policy for Eurosur and the subsequent procurement.**

Multilateralism / solidarity: Finally, solidarity exists in Frontex bureaucracy in that it denied any industrial imperative influence on the procurement process, but the procurement outcomes do not suggest that solidarity imperatives actually drove the procurement. **Thus multilateralism or solidarity would seem to pass the 'smoking gun' test, as a cultural driver sufficient to support the procurement but not necessary to explain it.**

Symbolic prestige: Symbolic prestige, linked to industrial aspiration to be associated with the Commission, was present and facilitated the efficient outcomes of the procurement but did not necessarily drive the procurement process. **Thus symbolic prestige would seem to pass the 'smoking gun' test, sufficient to support the procurement but not necessary to explain it.**

Findings and Analysis regarding the Theoretical Framework

The paragraphs below consider Strategic Choice, Sociological Institutionalism and Organisation Theory explanations for the collaborative procurement processes at different stages in the decision-making chain.

1) Explanations for the Eurosur Policy

Strategic Choice Explanation: Strategic Rationale for the Mission and ASS requirements

Member states had calculus security requirements to monitor EU borders for illegal transnational movements of the migrant crisis following the Syrian civil war and the breakdown of former control of migrant flows from Libya. However data showed that member states were concerned to retain sovereignty over the border surveillance function where possible. Further, the ECN and ASS contracts concerned border surveillance, but did not provide reaction capacity to solve the security threat. Therefore this driver could not explain the procurement

Sociological Institutionalist Explanation: Symbolic 'community of values' driver for the ASS requirements: Anecdotal evidence suggested that joint procurement of the surveillance capability was a way of salving the conscience of EU member states with

regards to the safety of migrants, thus answering the cultural driver of the Western 'community of values'. High levels of scrutiny of the Commission, with regards to this measure, also increased the pressure on organisation staff and affected the balance of drivers in the procurement. This scrutiny was a major conduit for cultural influences on the procurement processes and increased the weight of this driver for the procurement. This drove the pace of procurement where Frontex staff were anxious to meet public expectations for the safety of migrants. It facilitated procurement of both contracts and also increased the weight of EU commission role expansion objectives. In this case, EU and Frontex realised their objectives by aligning their policy and discourse to Western 'community of values' imperatives.

2) Explanations for the Political support for Eurosur and Frontex surveillance operation

Strategic Choice Explanation: Subduing member state concerns with compromises in the surveillance specification

Political support for the process was partially gained by the Commission meeting member state concerns over sovereignty of action. The concerns of member states regarding sovereignty over the performance of joint border surveillance solutions were a major constraint on Commission policy and procurement process for the ECN and ASS. These concerns were met in part by dumbing down the sophistication and investment into the surveillance solutions – this is expanded in the next section.

Sociological Institutionalism Explanation: Gaining political support via alignment with symbolic drivers, Western 'community of values' and solidarity within the organisation culture.

The research data indicated that the Eurosur and Frontex regulations reflected a concern for human rights aspects of border control. The EU culture of NGO input, via bodies such as the LIBE Committee, ensured that the 'community of values' was embedded in policy and counterbalanced concerns for sovereignty over security actions. Additional political support for the procurement occurred through the solidarity and multilateralism inherent in the Commission culture and reflected in the Eurosur and Frontex regulations. These established the necessity and legitimacy of Frontex to perform supporting functions for member states with the related procurement.

3) Explanations for the Eurosur and ASS specification

Strategic Choice Explanation: Technical imperatives were subdued due to member state concerns

The rational objectives for the surveillance solution was one that met the concerns over sovereignty and intelligence sharing of member state representatives and their border agencies, also that Frontex provided a cost efficient, timely service. Technical imperatives were of little weight in the specification of the ECN surveillance solutions. These were subdued where member state border agency had concerns over intelligence sharing so compromise solutions were offered for the surveillance solutions. The ECN solution agreed to was therefore suboptimal regarding both technical and content aspects, the ASS solution was a low cost, leasing option rather than an agency owned capability.

Organisation Theory Explanation: Industrial and Technical imperatives subdued by role expansion, agency rivalry

First, emphasis during the procurement processes was placed on gaining agreement at speed rather than focusing on a technically advanced solution. The Commission felt additional urgency to provide a surveillance solution because of competition from other organisations providing similar surveillance solutions, such as EDA's MARSUR and DG Maritime's CISE. The ASS contracts were technically of little value to Frontex being a 'fee for service' solution that required no proprietary technology. However, levels of technical acceptability were relevant to the ASS mission specifications and this was achieved with great efficiency through the competitive nature of the Framework contract.

Second, the evidence showed that high levels of organisation scrutiny strengthened Frontex's objectives for efficiency, this stemmed from an organisational survival driver, and aspiration for legitimacy. Therefore staff were anxious to avoid the censure of a bias towards industry and any preferences led by member state objectives.

Sociological Institutionalism Explanation: Symbolic drivers

First, the supranational structures and inherent culture of solidarity (and the related multilateralism driver) within Frontex helped to subdue member state sponsorship of specific solutions. This in turn reduced influence of the related technical and industrial imperative drivers in the procurement process.

Second, the civil military nature of the solutions contributed to the acceptability of the solutions with the emphasis on the civil security aspects. Research data showed that

non-military and civil security functions were a priority for Frontex and the Commission under the Schengen arrangements. The literature alleged that securitisation had influenced surveillance solutions. However, while Frontex staff profile had a bias to former military and security staff, and former military actors were involved in the the Frontex contracts, little evidence was found that these military aspects drove the procurement policy or process.

4) Explanations for Bureaucratic Processes and Contractual Negotiations

Organisation Theory explanations: Role expansion driver

The Commission's ambition for role expansion in the field of security was present as a driver in the Frontex case study. This was evident in the policy formation, the funding arrangements and the choice of contract format. Commission officials controlled and drove Eurosur and Frontex policy. This driver was amplified during the process due to the Commission's bureaucratic structure where the policy making meetings were controlled by the Commission and orchestrated by a charismatic EU official.

The Commission's funding arrangements also facilitated the procurement. The study showed that for both contracts, financing for the procurement was centrally secured by Commission approval (rather than directly from member states), thus facilitating the process. Commission and Frontex actors had influence, and therefore their calculus objectives, for efficiency and the success of the procurement - eventually leading to role expansion, were prioritised in the process.

Additionally, both contracts demonstrated the usefulness of the Framework form of contract in conferring negotiating power and cost efficiency to Frontex (rather than

industry). Thus, the Commission ensured that the contract costs were not contentious and could not give rise to member state complaint.

Sociological Institutionalism Explanation:

There was evidence that industrial actors sacrificed profit motives to gain the symbolic prestige of working with Frontex. This aspect enhanced the efficiencies of the two Frontex contracts and significantly contributed to their acceptability.

In sum, and to answer the research question, evidence suggests that the calculus drivers and strategic choice explanations cannot fully account for the Frontex procurement outcomes. Alignment with cultural, symbolic drivers helped to overcome political constraints and public concerns and contributed to the acceptable surveillance solution. Rational imperatives for heightened border security were not directly met by surveillance measures. The scrutiny and criticism expressed in the 'securitisation of border control' literature imparted the Western 'community of values' culture, enhancing organisation objectives for efficiency and reputation. This, along with Commission role expansion drivers, magnified the urgency for surveillance capabilities and encouraged the procurement processes. Finally, data indicated that the supranational nature of the organisation meant that multilateralism and solidarity was manifested in a 'taken for granted' cultural rule within the organisation, pursuant to the Frontex regulation. Thus the procurement was not viewed as a collaboration, but rather a Commission activity with all the solidarity that this represents.

The next concluding chapter presents the key findings of this thesis. It notes their applicability beyond the remit of this study and the contribution that this study makes to the collaborative procurement literature.

Conclusion

The politics of collaborative procurement are imbued with rational and cultural logics. These logics exist in the wider context but are realised via social processes within multilateral bureaucracies. The complexity of multinational procurement by NATO and the Commission requires a detailed observation of the balance of calculus *and* cultural drivers within bureaucracies to ascertain how they encourage successful collaborative procurement of a particular capability. *This thesis has challenged the basic assumption that rational and material political interests can explain collaborative procurement. It asserts that cultural and organisational interests also generate and influence the political support needed for collaboration.* The thesis has provided original analysis of material and ideational drivers, linked to the wider security and multilateral organisation contexts.

Existing scholarship on collaborative defence procurement tends to focus on the rational, economic aspects of procurement practices such as cost savings and industrial imperatives. While previous studies noted the material (or calculus) objectives for collaborative procurement, few analysed the contribution that cultural (or ideational) drivers and bureaucratic practices might bring to the collaboration. In contrast, commentary and scholarship concerning the securitisation of border surveillance and procurement of related capabilities, while including industrial interests, broaden the approach to include cultural aspects. This literature derives from the Western 'community of values' culture and focuses on human security and the fundamental rights of migrants. This thesis has therefore attempted to bridge the gaps between

collaborative defence procurement scholarship and that concerned with the procurement and securitisation of multilateral border surveillance activities.

The study used a theoretical framework that combines strategic choice theory, sociological institutionalism and organisation theory. This provided a fresh approach and contribution to the subject of collaborative procurement. Strategic choice offers realist explanations for procurement concerning self-interested objectives, such as national security or the material benefits of industry contracts. Sociological institutionalism emphasises the importance of the Western security and organisational contexts. It explains how socially constructed, cultural ideas and collective expectations in these environments can contribute to collegiate decision-making. Organisation theory offers explanations of organisation decision-making dynamics and self-interested objectives such as role expansion.

The theoretical framework supported explanations for specific drivers of the collaborative procurement process. Here, self interested, calculus, strategic choice drivers included the strategic rationale for member state security and cost efficiency considerations; industrial imperatives for member state private sector benefits; and technical imperatives for member state industrial development. Institutional, cultural, symbolic drivers included the Western 'community of values', which encourage an emphasis on the human rights of migrants; the civil military strategic culture, which prioritises functions such as border surveillance; the prestige associated with US RMA sophisticated surveillance assets; and for industry, the symbolic prestige of working with an international organisation. Finally, organisation theory supported explanations of the organisation role expansion driver.

The thesis examined the current context of collaborative procurement (and the related surveillance requirements) within the Western security environment and the NATO and EU organisations. It considered how these contexts affect joint policy for surveillance. It identified the presence of the drivers within these environments. The study considered how factors such as political agendas, industrial economies, security crises, the global financial cycle, rivalries between organisations, scrutiny, bureaucratic practices, organisational culture and funding structures affect the balance of the drivers within NATO and EU procurement policy, practices and outcomes.

Next the research used process tracing to recreate the procurement decision-making chains for the two case studies. It referred to Bennett's tests for causation to assess the influence and balance of the drivers at different stages of the collaborative procurement process. It drew conclusions regarding the combination of drivers that could fully explain collegiate decision-making during the multinational procurement of surveillance. These are fully explained in the Key Findings below.

Thus the thesis set out to answer the research question: is multilateral procurement of surveillance capability driven by culture or calculus? The research has concluded that both calculus and cultural explanations were present in NATO and EU procurement processes. *Significantly it identified the presence of symbolic and role expansion drivers in the decision making processes. This indicated that cultural explanations and organisational factors exhibited a greater influence than has been attributed to collaborative procurement dynamics in past research.* Where the EU had greater organisational control and a closer alignment with strategic cultures, the decision-

making was efficient and timely. On the other hand, NATO had less organisation control and was less aligned with strategic cultures. Consequently, the decision-making was inefficient and dysfunctional.

This chapter of conclusions now draws together the key findings of the research and indicates how they may be generalised for other collaborative procurement practices. It identifies the study's contribution to academic literature but also notes its limitations. Finally, it indicates potential avenues for future research. It argues for the application of the findings beyond the case studies and indicates how this novel approach could inform future joint acquisition practices.

Key Findings

The key findings of this study are important for their contribution to explaining successful collaborative procurement practices and their implications in future joint acquisitions. In both case studies, the findings suggest that the strength of calculus and rational drivers (such as strategic rationale, technical imperative and industrial imperative) are insufficient to explain on their own what drives collaborative procurement. Rather the findings suggest that additional organisation and cultural factors (role expansion and symbolic drivers) can help to explain the political support found for joint surveillance policy and its related acquisition.

The two case studies are different and exhibit varying emphasis on the findings. For NATO, political and multilateral, symbolic drivers were important, even though the bureaucratic structure significantly constrained these drivers. For Frontex, the

'community of values' cultural driver was significant for the joint surveillance mission. For the EU Commission, the role expansion driver was an important factor for the procurement policy. However, there are enough commonalities in the contexts to draw conclusions. The fact that the analysis found commonalities despite the diversity of the case studies gives a depth to the conclusions that may find salience in other joint procurement programmes. Preparation for future collaborative procurement policy for a specific capability may benefit from a focus on these aspects.

Four sets of key findings are listed below, regarding calculus, cultural, and organisation aspects of collaborative procurement. Then each finding is expanded and generalised to assess the implications for future procurement practices.

- **First, rational and calculus drivers were insufficient to explain the collaborative procurement outcomes.**
  - **Industrial and technical imperative drivers were subdued by cost concerns, multilateralism, the Western 'community of values', and organisation survival or role expansion drivers**

- **Second, additional ideational, symbolic drivers were needed to generate sufficient political support for the joint procurement. These included:**
  - **Alignment with Western 'community of values' missions for the surveillance made the procurement more politically acceptable;**
  - **Surveillance solutions that were aligned with civil military specifications and justifications gained more political support;**

- **Third, NATO and EU bureaucracies affect the delivery and balance of drivers in the procurement process**
  - **Scrutiny of the organisation affected societal, cultural expectations for the procurement policy and practices, this affected decision-making efficiency;**
  - **Role expansion and organisation survival drivers played a role in procurement policy and practices;**
  - **Organisation culture that is aligned closely to the strategic cultures is more efficient in procurement policy and decision-making;**
  - **Industry actors are incentivised to support the procurement process because of symbolic prestige associated with international organisation contracts; and**

- **Fourth, Multilateralism and member state solidarity encouraged collegiate dynamics and political support for the procurement.**

Calculus Drivers behind the Collaborative Procurement

Calculus, strategic rationale drivers for joint security missions were articulated in the discourse. They were necessary to initiate the multilateral procurement in both case studies. The implicit calculus drivers of industrial and technical imperatives were also present, as noted in the literature and primary data. However when considering how the joint procurement policy and acquisition were agreed these explanations were not always relevant.

Calculus drivers for procurement, such as the strategic rationale of security issues, or industrial or technical imperatives are inherently driven by self-interest, and thus potentially divisive. They are therefore often insufficient to achieve political support and to fully explain collaborative decision-making. Both case studies had elements of 'off-the-shelf' security solutions that considerably reduced industrial imperatives. Moreover, in the Frontex case study, the calculus driven reticence of member states regarding sovereignty over border surveillance activities constrained the specification of the ECN.

Thus technical and industrial imperatives were not present in the EU procurement outcomes, and few technical imperatives were found in the AGS outcomes. This is despite allegations in the literature that there would be. Other drivers in the procurement process outweighed industrial imperatives in the Commission and Frontex, such as the reputation of the organisation and inherent solidarity in the bureaucratic culture as explored below.

Calculus drivers alone could not therefore account for the final procurement outcomes. Additional symbolic and organisation role expansion drivers were needed to explain the collaboration and agreement to joint surveillance activity and procurement of the related capability. This finding is important as much current analysis and effort focuses on this aspect of collaborative procurement. Rational logics are essential to initiate and justify procurement policy, but they are insufficient to wholly encourage political and societal support for joint acquisition. If this limitation is acknowledged in preparation for future collaborative procurement policy, then efforts may be spared in this direction and

efficiency increased where focus on alternative cultural drivers and organisational aspects may encourage successful collaboration and coherent decision making.

Ideational drives to Generate Political Support

The second set of key findings concerned cultural, symbolic drivers derived from institutional explanations. These affected political and societal attitudes towards collaborative surveillance policy and procurement. The presence or omission of these cultural aspects affected the levels of political support for joint acquisition. Cultural, symbolic drivers are naturally cohesive and binding, and can be significant to achieve consensus in the process. Shared ideas contribute to cohesive decision-making for each of the three aspects of collaborative procurement related to symbolic drivers outlined in the case study analysis above. First, where societal, 'community of values' priorities regarding the surveillance mission are met; second, where cultural, multilateral aspects of political relationships are important for the procurement process; and third, where the form of the capability meets societal, civil military expectations for defence and security solutions.

This finding is important in that ideational, symbolic aspects have not been stressed in past analyses of collaborative procurement and not necessarily considered or incorporated in current procurement practices. It is useful to establish strategic cultures that are associated with the capability to be procured. Acknowledgement of these in the discourse surrounding future procurement policy and process may ease the achievement of consensus by member states.

The key findings regarding the culture of 'community of values' missions are interlinked with findings regarding organisational role expansion and survival drivers in policy decisions. Both the NATO and Frontex case studies demonstrated how the symbolic driver of the 'community of values' culture generated missions that related to the procurement activity. NATO and the Commission articulated their missions in the context of this culture to justify acquisition of surveillance capability. This finding, alongside the findings regarding urgency below, suggests that it is important to have the security missions, related to the capability in the procurement discourse, aligned to societal, security priorities. This is useful for prioritisation in future procurement plans.

The performance of 'community of values' missions was related to organisation reputation, relevance and future security role. NATO adjusted its mission to be associated with civil military disaster relief and border control. Frontex expanded its mission to perform the surveillance roles in the crisis situation. The implications are that, where the procurement organisation has an interest in the role to be performed, there are additional motivations and focus on procurement decision-making. Thus organisations, such as OCCAR, which have a core competence of procurement, do not necessarily have the same drive to agree policy and procurement agreement as where there is a role expansion driver. In future procurement practices, it may make sense for member states to use the EU or NATO for procurement where they are going to perform the functions associated with the policy.

A second cultural finding concerns a European societal and political preference for civil military surveillance solutions over purely military solutions. This stems from a preference for soft power and civil security solutions where there are little direct

military threats.[1182] The implications of this preference affect the political acceptability of proposed solutions and industry's approaches to providing those solutions. It has meant that the defence industry is adapting former military solutions to dual use civil security assets. Further, the Commission currently has no remit for a defence role. Thus the Frontex case study demonstrated that the civil military nature of the surveillance solution fell within the Schengen Borders Code,[1183] and societal expectation for the provision of security. This legitimised the Frontex provision of the security solution.

This is important for future procurement, where civil military solutions and capabilities are prioritised for acquisition. This could be because they could gain joint political acceptance, and demand for these types of assets will increase. Thus in the current European Defence Action plan,[1184] the Commission security activities may find greater traction for future procurement (compared to those proposed by the EDA) where there is a strong organisational driver and the civil military solutions proposed fit with member state joint security solution preferences. This will continue the EU joint security provision trajectory along civil security capability lines as opposed to military capability.

1182. PRESIDENT JUNCKER 2014. President Juncker's Political Guidelines. Strasbourg: European Parliament.

1183. Schengen Borders Code: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:l14514 Accessed April 2018

1184. EUROPEAN COMMISSION 2016. COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS European Defence Action Plan; COM(2016) 950 final. Brussels.

Civil military surveillance capability may also be associated with the prestigious US RMA culture, however this is not included in these key findings. The lack of technical imperatives in the Frontex case study suggests that prestige and sophistication of surveillance solution were not major factors in the procurement process. This may have played a greater part in the NATO AGS Programme, where the US was key to the procurement. However, here, the driver of symbolic prestige was not considered dominant in the process.

Moreover, the research showed that the civil security industry sector had different characteristics to the traditional defence sector. This necessitated a different approach by organisations as customers, where the organisations can exercise more power over the fragmented supplier base. There are fewer Prime contractor arrangements and the procurement customers, as seen in the Frontex case study, therefore retain greater control. However, this is unlikely to continue with the expansion of the defence sector into civil security functions.

Symbolic Drivers to Generate Political Support - how they are delivered in NATO and the EU organisations.

The third set of findings concerned how the cultural, symbolic drivers were put into operation in NATO and EU organisations. This approach builds upon Scott's ideas of open/natural systems of organisations where they are driven by the need to survive but also embedded and constituted by the environments in which they operate.[1185] Socially constructed ideas also have a bearing on decision-making and consensus for

1185. FARRELL, T. 1996. Figuring out fighting organisations: The new organisational analysis in strategic studies. *Journal of Strategic Studies,* 19**,** 122-135.

collaboration and surveillance solutions. Three aspects affected the balance of drivers for procurement: the level of scrutiny; the level of urgency felt within the organisation and alignment of organisation culture with strategic culture.

The level of organisation scrutiny had a major effect on the balance of the drivers and their influence on collaborative procurement practices. The measures by which NATO and the Commission are scrutinised and judged, reflect societal concerns. This gives weight to certain drivers and the thesis has focussed on elements such as cost efficiency, the Western symbolic 'community of values' concern for human security, and civil military security solutions. Societal concerns leant an ethical aspect to the security solutions where the member state agency and organisation responsibilities - and therefore reputation and organisational survival - were also linked to the crisis. This increased the balance and influence of the Western 'community of values' driver.

These levels of scrutiny affect the behaviour of decision-makers. The higher the level of scrutiny, the more their behaviour is influenced to align with the expectations of efficiency or security solution. This is because of the consequences for the organisation's reputation if the expectations are not met. The high profile coverage of the migrant crisis in 2015 ensured political focus on this. The Frontex Regulation expresses an objective for the safety of migrants and the process reflected a high level of sensitivity to the scrutiny of internal auditors and external critics. The procurement decision-making exhibited few inefficient industrial or technical imperatives. On the other hand, NATO is subject to less scrutiny, especially at the policy stage. Therefore there are fewer repercussions regarding reputation and therefore decision-makers exhibit less sensitivity to aspects such as efficient decision-making or time keeping, and little

restraint regarding *juste retour* and industrial imperatives. The nature and low profile of criticism of NATO procurement activity was a contributing factor to the delays and inefficiencies experienced in the AGS Programme.

The level of pressure and urgency of the security context for which surveillance was needed also amplified or reduced certain drivers for procurement. Urgency both represents and encourages coherence in security outlook and requirements. Interested actors may use it to achieve their objectives. Thus it enabled and strengthened the role expansion drivers of the Commission, where fulfilling the surveillance role was in line with member state objectives for an urgent response to the crisis.

Urgency may reduce consideration of other drivers such as technical imperatives. Perceived urgency in a security issue, for example the migration crisis in 2015, encouraged collaboration and procurement processes where member states felt pressure to provide surveillance solutions and rescue missions, but were not concerned about acquiring highly sophisticated assets. The high levels of media coverage of the migrant crisis increased the pressure of this driver within the security environment. In the Frontex procurement, the urgency of the migrant crisis affected all stages of the procurement of the ECN and ASS contracts.

At the inception of the NATO AGS Programme, the security context exhibited little urgency for the requirement. This reduced incentives for timely processes and led to other drivers, such as *juste retour,* becoming the focus of the procurement. An urgent driver will be amplified whether it is a rational or cultural driver and the pressure felt by those immediately involved demands action due to concern for the consequences, in this

case the deaths of migrants. The level of subsequent judgement and accountability also enhances the pressure felt by organisation actors.

The alignment of organisation cultures with strategic cultural imperatives eased the procurement process. 'Community of values' and civil military drivers are affected by the staff profiles and bureaucratic ethos of NATO and the EU. Staff with a military background have a different approach to those with a civilian background. For example, NATO has partially adapted its role to align with the softer, civil military culture through adjusting the articulation of its missions to include roles such as border surveillance and disaster relief. NATO's bureaucratic culture is less aligned with 'community of values' and civil military cultures, so these aspects fit less well with staff, organisation culture and processes. Anecdotal data has indicated that the community of values and civil military arguments were used externally, rather than internally, with member state constituents to justify the procurement of the AGS Programme. This weakens the driver.

On the other hand, the Commission's activity is tied to the civil security sphere via the Schengen Code. This means that civil military drivers are a natural fit and therefore strong. The EU has greater input from NGO's regarding the symbolic 'community of values' and civil military expectations. A focus on organisation culture affects delivery of these imperatives, and therefore staff behaviour and decision-making can aid approaches to future procurement processes. Again, this has implications for future procurement with regards to the European Defence Action Plan. It suggests that civil military procurement efforts may be more successful within the Commission's organisation culture and military procurement more successful via cooperation with

NATO and its military culture. This is especially relevant where overlapping member states in both organisations are unlikely to support duplicate procurement programmes in both organisations.

Thus urgency of the security context, scrutiny of organisations and organisational culture related to the 'community of values' driver and, to a lesser extent, civil military solutions, place an emphasis on human security capabilities as opposed to defence capabilities. This humanitarian approach to security has implications for the types of assets that are prioritised when it comes to pooling and collaboration. Assets that relate to disaster relief and other aspects of human security may be prioritised over kinetic assets. If procurement strategies take into account this strategic culture other missions driven by 'community of values' may be applied to other assets such as strategic airlift or satellite assets.

A final finding regarding organisation effects concerns industry actors who support the collaborative procurement because of the symbolic prestige associated with international organisation contracts. This finding is important as it is not often referred to in analysis of collaborative procurement and it has real implications for the efficiency of the contract. The symbolic prestige that is related to international organisations provides incentives for firms to work with them. This confers power to organisations and often leads to enhanced cost efficiency in the implementation of the contract. Here, firms accept low cost terms in return for the reflected legitimacy that they receive through association with NATO or the EU Commission.

Multilateralism and Collegiate dynamics in collaborative procurement

A fourth significant finding concerns political relationships and symbolic, multilateral drivers within the procurement organisations of NATO and the EU. Where these are emphasised, collegiate dynamics may follow and reduce bureaucratic politics. The NATO AGS case study demonstrated that the inclusion of multilateral motivations for participation was a symbolic, cultural driver during the acquisition process. The Frontex case study showed that the inherent solidarity in its bureaucratic culture subdued industrial imperatives. The relationships involved in collaborative procurement provide additional obligations in the process.

This finding is important as political support may not just come from societal origins, but also from the elite policy makers whom have political objectives related to grand strategy. Thus there is a symbolic, collegiate obligation when commitment is made to an international programme that is not present in a national programme. This can have future implications for the approach to a procurement policy. A political strategy may be associated with the procurement, where political objectives of participating states may be noted as giving additional incentives for collaboration. This may relate to how the capability that is being procured fits into a wider picture of security objectives. For example, France only agreed to the AGS common costs where the capability was included in a bigger joint surveillance effort.

A political procurement strategy may also relate to a broader obligation of burden sharing, where member states want to procure assets to contribute to a joint political effort, rather than because there is an immediate security requirement for them. This

dimension may drive the essential political support that is needed for a procurement programme.

The involvement of politicians in the detailed policy decision-making, such as CNAD debates, may complicate the process as it brings an added dimension. There is a history of procurement organisation evolution where these have developed from functional, expert arrangements (with little policy-making powers) to political arrangements where elite decision-makers are involved with decision-making but inevitably bring with them many external considerations.[1186] This was reflected to some extent in the case studies where the political processes of NATO meant that elite decision-makers were involved in the process, but also caused impediments to decision-making where member state objectives got in the way of procurement efficiency priorities. In contrast, the EU focus on functional aspects of the capability and procurement involved few political exchanges between member states and thus led to a smoother process.

In sum, the thesis established the presence of Western strategic, symbolic cultures that influence collaborative procurement decision-making. The research identified three symbolic systems that could encourage the joint acquisition of surveillance: the Western 'community of values' culture, civil military culture and the symbolism of political solidarity and multilateralism.

Cultural, symbolic drivers may reduce the divisive self-interest of the calculus drivers and encourage coherent collaboration for joint security policy and procurement. They

1186. DEVORE, M. R. 2012. Organizing international armaments cooperation: institutional design and path dependencies in Europe. *European Security,* 21**,** 432-458.

are related to ideas and social behaviour that affect decision-making via a worldview or organisation environment. They tend to encourage behaviour 'to conform to common objectives, forms and practices'.[1187] As such, they are useful to explain collaborative procurement as they posit ideas to which member state representatives and other decision-makers may conform. If these ideas or similar frameworks can be worked into preparations for future procurement this should encourage a more cohesive and effective decision-making process.

Limitations of this Study

This study is limited in that the 'n' number of case studies is small, the case studies are very different from one another, and they are in a specific region, time period and security context.

A small number of case studies always make generalisations difficult, if not impossible. There are few cases of multilateral collaborative procurement where the organisation is to perform the function, and this has limited the data available for research. Moreover, the difference in case study profiles, where the organisations are *sui generis*, meant that the number of diverging variables within the organisations was high. The study countered this by focussing on the commonalities of the organisation context and centring the research on the capability drivers.

1187. EYRE, D. P. & SUCHMAN, M. C. 1996. Status, norms, and the proliferation of conventional weapons: An institutional theory approach. *In:* KATZENSTEIN, P. J. (ed.) *The Culture of National Security: Norms and Identity in World Politics.*

The case studies of NATO and the EU also limited the enquiry to a Western context. Here, the lack of equivalent organisations in the different regions of the world makes application beyond a Western context difficult to contemplate, although the framework could be applied to a non-Western context to look for similar findings. The security context of the migration crisis and its focus on border surveillance is also limited to a contemporary time period. Collaborative procurement occurs in different security contexts, such as those related to expeditionary warfare, counter terrorism, cyber warfare, environmental risks or regional defence. The cultural drivers identified in this research may not therefore always be helpful in these other contexts.

Also, the research considered the procurement of a specific capability: surveillance. This limited the cultural parameters that are applicable to this function. This research is relevant to a contemporary security context and to surveillance capabilities, so the specific conclusions may not be applicable to a different time period or to different assets. Further research would be needed on these aspects.

Despite these limitations, the research has pointed to the commonalities of the case studies, namely in the procurement of surveillance capability, the reflection of strategic cultures and the multilateral, organisational context.

Recommendations for Future Research

The theoretical framework used in this thesis may be adapted for a broader or deeper consideration of how procurement of certain capabilities are affected and encouraged by strategic cultures. The study used organisational theory to operationalise a cultural

agenda, which may be helpful in other research projects. This approach may be adapted and generalised, as indicated above and applied to procurement of other capabilities and by other types of organisations. Additionally, future research may want to test the findings via different, qualitative methodologies.

First, the thesis generates a toolbox through which future avenues of research may be explored and cultural drivers identified for generating political support. Capability requirements can be aligned to strategic culture at the different levels of decision-making, from grand strategy to procurement policy to procurement process decision-making.

Second, organisation aspects can be acknowledged and applied, especially where NATO and the EU continue with their procurement programmes, so the organisational context is a constant. This awareness of organisation factors, such as bureaucratic structure and organisational culture can be built into procurement decision-making and enhance the efficiency of the process. Moreover, emphasis on symbolic multilateralism and solidarity can help to rationalise decisions for certain programmes.

Future research may use this toolbox to address different capabilities within different security contexts and cultures. The approach may be employed in different security contexts such as expeditionary warfare, counter terrorism, cyber warfare, environmental risks or regional defence. It may also address other types of security capabilities ranging from flight refuelling, data analysis infrastructure, crisis coordination centres or missile defence systems. Where these assets are related to different strategic cultures,

the culture can be identified and utilised to generate political willingness and enhance better procurement decision-making.

There is also additional research within the frame of reference used by this study. For example, the strategic cultures and political identities identified here, Western 'community of values' and civil military solutions, are applicable for collaborative procurement of other capabilities such as assets used for maritime and land border patrols. Analysis of the procurement of programmes such as Air Command and Control systems (ACCs) by NATO may benefit from the approach used in this study, given that it is owned and operated by NATO and entails surveillance and management of regional airspace.[1188]

Additional analysis of capabilities such as AWACs may also identify further commonalities with this research, especially given the current efforts to renew this capability.[1189] Multilateral imperatives associated with NATO and the EU may also be compared to other organisations such as OCCAR, or in different contexts such as the Franco British Treaty.[1190]

Finally, the research methodology was qualitative, this generated sufficient data for analysis, but meant that the methods of analysis were different to those measurements

1188. https://www.nato.int/cps/en/natohq/topics_8203.htm Accessed October 2017

1189. https://www.nato.int/cps/ua/natohq/topics_48904.htm Accessed October 2017

1190. MAULNY, J.-P. 2012. The Franco-British Treaty, The European Union's 'Pooling and sharing' and NATO's 'Smart Defence'; How can the different initiatives in terms of pooling capabilities be coordinated. Paris: IRIS.

used in qualitative methodology. Future studies may want to adopt different methodologies to further test the findings.

Closing Remarks

This thesis has studied the social processes behind collaborative procurement and attempted to address the gaps in existing scholarship regarding cultural and organisation effects on the process. It sought to unpack organisation processes to explain how the macro (security) and micro (organisation) environments affect the balance of drivers for collaborative procurement. It aimed to demonstrate how symbolic, strategic cultures encourage the political support required for collaboration. It attempted to clarify and define these influences and link them to evidence found in this academic research.

The limitations of this study notwithstanding, this research makes an important contribution to the literature of collaborative procurement. Its focus on the symbolic, strategic cultures, organisational aspects and the specific capability procured, widens and deepens our understanding of the frame of reference that surrounds joint acquisition by multilateral organisations. It suggests an innovative way of approaching procurement that can be applied to different capabilities and so enable continuation of the research agenda beyond this thesis.

The study highlights the links between the two case studies and offers substantial data to support the arguments. It considers existing studies on joint procurement, builds upon these, and generates new data to support a fresh approach to the subject. It contributes valuable interview data and analyses primary sources such as speeches and policy

documents to substantiate the conclusions of the research, thus providing a useful addition to the toolbox used by politicians, diplomats, industry and organisation staff when trying to gain consensus for much needed collaborative procurement activity.

The research provides insights into the formation and implementation of joint acquisition policy. It highlights previous omissions in the literature and contributes to the understanding of past approaches that can be applied to future practices. Political considerations of multilateralism and specific strategic cultures are taken, alongside the rational premise, for future projects and aid the generation of political support for collaborative procurement. This in turn enhances efficiency of future procurement projects and enables successful fulfilment of capability requirements.

Annex:

Member State Security Strategy Documents1191

France:[1192] The French White Paper on Defence and National Security mentions surveillance many times, both in the context of space surveillance and marine surveillance. France's Mediterranean shoreline clearly affects its national considerations. Terrorism gains 18 mentions, and trafficking in various guises gets 18 mentions and seems to be synonymous with cross border crime. There is an emphasis on the need for pre-emption and a strategy of 'knowledge and anticipation' and which infers that some sort of monitoring is needed.[1193] Migration is referred to in passing but the main threat is identified as human trafficking. France indicates that Frontex is part of the solution.[1194] The mention of failed states may infer that expeditionary, military action could be needed.

United States:[1195] The United States publishes both a 'National Military Strategy' from the Joint Chiefs of Staff[1196] and a 'National Security Strategy' approved by the

1191. These documents relate to the period, 2003 - 2015, that is relevant to the case studies discussed in Chapter 4 and 5.

1192. THE REPUBLIC OF FRANCE 2013. French White Paper, Defence and National Security.

1193. Ibid. p.68

1194. Ibid. p.103

1195. JOINT CHIEFS OF STAFF 2015. The National Military Strategy of the United States of America. *In:* OFFICE OF THE SECRETARY OF DEFENSE (ed.). Washington.; THE WHITE HOUSE 2015. United States National Security Strategy. Washington.

1196. JOINT CHIEFS OF STAFF 2015. The National Military Strategy of the United States of America. *In:* OFFICE OF THE SECRETARY OF DEFENSE (ed.). Washington.

President.[1197] This section considers the political strategy that guides policy decisions for the acquisition of surveillance equipment. While the US Military Strategy specifically mentions aerial surveillance as part of the solution to counter terrorism operations,[1198] this is an opinion that is led by military organisations, rather than the politicians. The US is affected by terrorism concerns after 9/11, so although the physically proximate concerns of Europe do not directly affect the States, it has an interest in monitoring the security situation on the borders of the 'West'. The US has been accused of using NATO to further its military industrial concerns and this will be further examined in the specific case studies below.[1199]

Germany:[1200] The German Security White Paper of 2006[1201] mentions the threat of terrorism over 19 times in the document, cross border crime over 6 times and human trafficking over 3 times. The document articulates the need for surveillance to perform situational reconnaissance tasks[1202] over four times, mainly in a military context. Surveillance is not mentioned as a solution to the transborder crime or terrorism. The Defence Policy paper of 2011 is a shorter paper but also underlines the changing nature of threats to terrorism and organised crime, as well as international threats to infrastructure and cyber crime. As expected in a defence paper, the importance of

1197. THE WHITE HOUSE 2015. United States National Security Strategy. Washington.

1198. JOINT CHIEFS OF STAFF 2015. The National Military Strategy of the United States of America. *In:* OFFICE OF THE SECRETARY OF DEFENSE (ed.). Washington. p.10

1199. SPEAR, J. 1997. Bigger NATO, Bigger Sales. *The World Today,* 53**,** 272-274.

1200. GERMAN FEDERAL MINISTRY OF DEFENCE 2006. German White Paper 2006 on German Security Policy and the Future of the Bundeswehr.

1201. Ibid.

1202. Ibid. p.43

international efforts via NATO is also underlined. There are inferences to Homeland Security with the emphasis on the national defence.

Spain:[1203] The Spanish National Security Strategy was published in 2013.[1204] Its emphasis regarding transnational threats can be seen in the significance given to terrorism and organised crimes, both get over 30 mentions. Surveillance has a low profile and is referred to with regards to migration and cybercrime. Migration is perceived as less of a threat than Organised Crime and Terrorism. Private sector involvement in security solutions is described with regard to maritime security and the management of migratory flows.

Italy: Italy has not published a national security strategy but it has various defence and security papers, and these may be viewed in the whole. As with other countries in Europe, terrorism and organised crime are perceived as major strategic threats. Clandestine immigration is also included as a threat. The solution to these threats is identified as includes cooperative initiatives with the EU and the US.[1205]

Greece: This paragraph refers to an academic article which comments on various defence papers, expenditure and internal security papers.[1206] The analyst notes that security in Greece is no longer measured as a pure military concern and therefore any

1203. SPANISH PRESIDENCY OF THE GOVERNMENT 2013. The National Security Strategy, Sharing a Common Project. Spain.

1204. Ibid.

1205. DI CAMILLO, F. & MARTA, L. 2009. National Security Strategies: the Italian case. *Documentos de Trabajo (Real Instituto Elcano de Estudios Internacionales y Estratégicos)*, 1. p.13

1206. DOKOS, T. 2007. Greek Security Policy in the 21st Century. *ELIAMEP Policy Paper No.9.* Athens: Hellenic Foundation for European and Foreign Policy.

security strategy involves internal ministries and the security sector.[1207] Terrorism is mentioned as the highest priority with organised crime and illegal migration. Surveillance is mentioned in a military context for joint operational planning between the Navy and Airforce. The paper describes contributions made by the Greeks for the NATO's Operation Enduring Freedom and STANAVFORMED now SNMG2 (Standing NATO Maritime Group 2)

Bulgaria: Bulgaria's security strategy is presented in the context of its membership with the EU and NATO. It does not identify any direct military threats but sees the potential for conflict and crisis situations at a distance, direct threats include the asymmetric threats of terrorism, organised crime, human trafficking, smuggling and then cyber crime, failed states overspill and energy security.[1208]

Roumania: Roumanian security strategy is very much presented as integral to its integration in the EU and NATO.[1209] As emphasised in the document: 'it is not the fear of threats but the wish to secure stability and build a better future which motivates Romania's options for European and Euro-Atlantic integration'. Its emphasis is on regional instability, although terrorism, organised crime and trafficking come third on the list of international risks. NATO is integral in its national defence strategy with NATO integration and goals being number one in the national defence policy objectives.[1210]

1207. Ibid. p.6

1208. BULGARIAN DURZHAVEN VESTNIK 2011. National Security Stategy of Bulgaria. National Assembly Decision No 19/8.032011.

1209. MINISTRY OF NATIONAL DEFENCE 2014. Romania's National Security Strategy.

1210. Ibid. section 5.

EU Security Strategy 2003[1211] - 2015[1212] The EU Security Strategy of 2003 identified five major threats that are reflected to greater or lesser extent in the security strategies above. They are terrorism, weapons of mass destruction, regional conflicts, failed states and organised crime.[1213] Since then, the security environment has evolved and a new strategy is due to be published in 2016. An initial statement does not go into any detail but indicates the 2015/16 report's emphasis on a global and complex environment.[1214] It emphasises migration concerns and a headline policy solution for the Common Defence and Security Policy (CDSP) as a 'joined-up' approach. This is not elaborated at this stage.

European Security Research Advisory Board (ESRAB) Report 2006:[1215] While national and EU security strategies are notable for their articulation of threats and the general nature of the proposed solutions, the ESRAB report is written by academics, and military and private sector practitioners. The document is important as evidence of a narrative for what is being recommended for security solution policy. It focuses on 'Mission Area Analysis' and considers border security, protection against terrorism and organised crime, critical infrastructure protection, and restoring security in case of a crisis. Situational awareness and some sort of surveillance is deemed appropriate for

1211. EU 2003. A Secure Europe in a Better World, European Security Strategy. Brussels.

1212. EUROPEAN COMMISSION 2015a. The European Agenda on Security. Strasbourg.

1213. EU 2003. A Secure Europe in a Better World, European Security Strategy. Brussels.

1214. EUROPEAN COMMISSION 2015a. The European Agenda on Security. Strasbourg.

1215. ESRAB is a board appointed by the EU commission. While it is not an official policy document for the EU Commission it is a useful, practical document to monitor the EU security concerns, albeit with an security sector agenda: ESRAB 2006. Meeting the Challenge: The European Security Research Agenda. *European Security Research Advisory Board Report.* Luxembourg.

many of these mission areas, but specifically border security and restoring security in a crisis indicates the need for aerial ISR.

NATO Strategic Concept 1999 and 2010:

The 1999 Strategic Concept was written before 9/11 and the major influx of migrants. The emphases of the threats include the risks of political instability, ethnic conflict (relating to the Balkans) and proliferation of Weapons of Mass Destruction. The 2010 Strategic Concept specifically refers to terrorism but also the reference to instability:

'Instability or conflict beyond NATO borders can directly threaten Alliance security, including by fostering extremism, terrorism, and trans-national illegal activities such as trafficking in arms, narcotics and people'

Recent sources of the West's[1216] preoccupation with certain threats can be found in the latest Eurobarometer and Transatlantic Trend surveys and reflect public attitudes as opposed to political elites.

Special Eurobarometer 432:[1217] This survey was carried out on behalf of the Directorate General for Migration and Home Affairs in March 2015. While most people identified threats to security within the EU such as financial crises, poverty and corruption, they also felt a rising insecurity from external factors. This included terrorism, organised crime and irregular migration. There was a marked increase to the threat of terrorism, with over 68% of respondents expecting this threat to increase. However, when asked

1216. Here West refers to Europe and NATO member states such as the US and Canada.

1217. EUROBAROMETER 2015. European's Attitudes Towards Security. Brussels: Directorate-General for Migration and Home Affairs. (28,082 respondents interviewed face to face in their mother tongue)

about the response to these threats, only 32% of respondents consider that EU institutions and agencies should play an important role.

Transatlantic Trends 2014:[1218] This survey focussed on the perceived impact of immigration, and in the security section focussed on cooperative security. While the report did not focus on a general definition of threats, on both sides of the Atlantic, issues of mobility, migration, and integration connect with foreign, security, economic, and social policy. The West still consider that NATO is essential as an institution and support NATO carrying territorial defence as a mission.

1218. GERMAN MARSHALL FUND 2014. Transatlantic Trends: Key Findings 2014. *http://trends.gmfus.org/files/2012/09/Trends_2014_complete.pdf*
accessed February 2016. (1000 people in 13 countries US, Turkey, Russia, France, Germany, Italy, the Netherlands, Poland, Portugal, Sweden, Spain and the UK, computer assisted telephone interviews)

NATO Interview Schedule

Robert Bell:	Former Diplomat – speaking a private capacity *(Brussels, 18th November 2016)*
Ludwig Decamps:	Current Director for Armament and Aerospace Capabilities, Defence Investment Division, NATO HQ *(Brussels, January 2017)*
Jim Edge:	Current General Manager of NAGSMA 2013 - date *(Brussels, 18th October 2016)*
Rick Froh:	Former Deputy ASG Defence Investment Division, NATO HQ *(Brussels, 18th November 2016, and 11th January 2017)*
Vice Admiral Malcom Fages:	Deputy Chairman of the NATO Military Committee 2000 - 2003 *(Phone Interview, 3rd August 2016)*
Clarence Juhl:	Former Deputy Secretary of Defense Representative Europe, Deputy Defense Adviser US Mission NATO Brussels Belgium 1996 - 2007 *(Phone Interview, 4th November 2016)*
007:	NAGSMA official *(Brussels, 11th January 2017)*
009:	Diplomat – speaking in a private capacity *(Brussels, 11th January 2017)*
011:	Former Military Procurement Expert – speaking in a private capacity *(Shrivenham, 23rd June 2016)*

Lord George Robertson:	Former NATO Secretary General 1999 - 2003
	(House of Lords, 15th November 2016)
Col. Volker Samanns:	*(Dusseldorf, 25th January 2017)*
Brooks Tigner:	EU/NATO Affairs Correspondant IHS Janes Defence Weekly
	(Brussels, 10th January 2017)
002 :	Industry expert - speaking in a private capacity
	(London, 3rd August 2016)
Erling Wang:	Former Chairman of NAGSMO July 2012 - July 2016; Assistant Secretary General MOD Norway 2010 - 2014; Chairman of NATO Military Committee
	(Oslo, 20th October 2016)
Otfried Wohlleben:	Procurement Expert - speaking in a private capacity
	(Dusseldorf, 25th January 2017)
John Young:	Politician - speaking in a private capacity
	(Phone Interview, 1st September 2016)
Bob Zeiser:	Programme Director, Northrop Grumman 1992 – to date
Matt Copija:	Programme Manager, Northrop Grumman 1995 – to date
	(Joint phone interview, 3rd May 2017 and 12th July 2017)
001	Industry Expert - speaking in a private capacity
	(Phone Interview, 25th April 2017)

EU Interview Schedule

Gregorio Ameyugo:	Procurement Expert - speaking in a private capacity
	(Warsaw, 16th September 2016)
Peter Bondar:	Industry Expert - speaking in a private capacity
	(London, 3rd August 2016 and 20th July 2017)
Alexander Dalli:	Former Pooled Resources Official, Frontex
	(Malta, January 2016)
005	Procurement Expert - speaking in a private capacity
	(Warsaw, 14th September 2016 and 22nd September 2017)
Louis Galea:	Former Member of the European Court of Auditors
	*(Malta, 2nd May 2017)*Ivan Inchovsky
	(Warsaw, 14th September 2016)
003	Procurement Expert - speaking in a private capacity
	(Warsaw, 22nd June 2016)
004	Procurement Expert - speaking in a private capacity
	(Warsaw, 22nd June 2016)
Francois Laruelle:	Hd ICT Unit, Frontex
	(Warsaw, 22nd June 2016)
Luis Manuel Cueste:	Manager GMV Eurosur Maintenance Contract
	(Warsaw, 22nd June 2016)
006	speaking in a private capacity
	(Brussels 4th April 2016 , 2nd January 2017)
008	speaking in a private capacity
	(Phone interview 22nd September 2016)

Darek Saunders:	Head of Analytics, Frontex
	(Warsaw, 14th September 2016)
Brooks Tigner:	EU/NATO Affairs Correspondant IHS Janes Defence Weekly
	(Brussels 10th January 2017)

Ethical Approval Letter

Research Ethics Office
King's College London
Rm 5.12 FWB (Waterloo Bridge Wing)
Stamford Street
London
SE1 9NH
24 February 2015
TO: Lucy Paterson
SUBJECT: Confirmation of Approval

Dear Lucy,

Thank you for submitting your Research Ethics Minimal Risk Checklist. This letter acknowledges the receipt of your checklist; your Research Ethics Number is **MR/14/15-32**. Be sure to keep a record of this number and include it in any materials associated with this research.

Record Keeping:
In addition, you are expected to keep records of your process of informed consent and the dates and relevant details of research covered by this application. For example, depending on the type of research that you are doing, you might keep:

- A record of the relevant details for public talks that you attend, the websites that visit, the interviews that you conduct
- The 'script' that you use to inform possible participants about what your research involves. This may include written information sheets, or the generic information you include in the emails you write to possible participants, or what you say to people when you approach them on the street for a survey, or the introductory material stated at the top of your on-line survey.
- Where appropriate, records of consent, e.g. copies of signed consent forms or emails where participants agree to be interviewed.

Audit:

You may be selected for an audit, to see how researchers are implementing this process. If audited, you will be expected to explain how your research abides by the general principles of ethical research. In particular, you will be expected to provide a general summary of your review of the possible risks involved in your research, as well as to provide basic research records (as above in Record Keeping) and to describe the process by which participants agreed to participate in your research.

Remember that if you have any questions about the ethical conduct of your research at any point, you should contact your supervisor, the Research Ethics office, or a member of your Department's Research Ethics Panel for advice.

Feedback:

As KCL is currently trialling the Minimal Risk Process, you may be selected to provide feedback on the Minimal Risk guidance, form and process. You can also provide feedback on the process by emailing rec@kcl.ac.uk .

We wish you every success with this work.

With best wishes,

Research Ethics Office

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and information security (OJ 2010/S 66-098323) and for the call for tenders Frontex/OP/98/2010 concerning the Eurosur big pilot project in the field of information technologies and communications (OJ 2010/S 90-134098), and also of all associated decisions, including the decisions to award the contracts to other tenderers, and, secondly, for damages for the harm allegedly sustained as a result of the contracts being awarded to those tenderers,. Luxembourg: European Court of Justice.

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